

**COMPAQ**

# ARMADA STATION

Compaq Armada 7000  
Family of Personal Computers

## INSTALLATION & OPERATIONS GUIDE



# Notice

The information in this guide is subject to change without notice.

COMPAQ COMPUTER CORPORATION SHALL NOT BE LIABLE FOR TECHNICAL OR EDITORIAL ERRORS OR OMISSIONS CONTAINED HEREIN; NOR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE FURNISHING, PERFORMANCE, OR USE OF THIS MATERIAL.

This guide contains information protected by copyright. No part of this guide may be photocopied or reproduced in any form without prior written consent from Compaq Computer Corporation.

© 1998 Compaq Computer Corporation.

All rights reserved. Printed in U.S.A.

Compaq and LTE are registered in the U.S. Patent and Trademark Office. Armada is a trademark of Compaq Computer Corporation.

Microsoft, MS-DOS, and Windows are registered trademarks of Microsoft Corporation.

The software described in this guide is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of the agreement.

Product names mentioned herein may be trademarks and/or registered trademarks of their respective companies.

## **ARMADASTATION**

Compaq Armada 7000 Family of Personal Computers

## **Installation and Operations Guide**

First Edition April 1998

Part Number 203118-001

**Compaq Computer Corporation**

# CONTENTS

## *preface*

<b>USING THIS GUIDE .....</b>	<b>xi</b>
-------------------------------	-----------

## *chapter 1*

### **GETTING STARTED**

Contents of the Packing Box.....	1-1
Removing the Keys from the PC Card Slot.....	1-2
Installation Requirements.....	1-3
Setting Up a Desktop System Without an External Monitor.....	1-4
Connecting the Keyboard and Mouse .....	1-5
Connecting the Expansion Base Power Cord.....	1-6
Docking the Computer.....	1-8
Turning On the System.....	1-9
Setting Up a Desktop System with an External Monitor.....	1-10
Installing the Monitor on a Monitor Support Cover .....	1-11
Connecting the Keyboard, Mouse, and Monitor .....	1-12
Completing the Setup.....	1-13

## *chapter 2*

### **IDENTIFYING COMPONENTS**

Left Side Component .....	2-1
Front and Top Components.....	2-2
Right Side Components.....	2-4
Rear Panel Components .....	2-6
Regional Differences.....	2-7

*chapter 3*

**GETTING CONNECTED**

- Connecting an External Device ..... 3-1
  - Selecting a Connector..... 3-1
  - Connecting an External Device to the System..... 3-2
- Using an External Device in the System ..... 3-3
  - Audio Equipment ..... 3-3
  - External Keyboard..... 3-5
  - External Monitor or Overhead Projector..... 3-5
  - Joystick or MIDI Device ..... 3-5
  - USB Equipment..... 3-6
- Connecting a Modem..... 3-6
  - Connecting an RJ-11 Jack ..... 3-8
  - Connecting a 25-Pin Connector ..... 3-8
- Establishing an Infrared Link ..... 3-9
  - Linking with the Infrared Port..... 3-10
  - Linking with an Optional External Infrared Transceiver..... 3-11
- Connecting to an Ethernet Network ..... 3-12
  - Connecting a Network Cable ..... 3-13
  - Installing Network Drivers..... 3-14

*chapter 4*

**DOCKING AND UNDOCKING**

- Preparing to Dock the Computer ..... 4-1
  - When the Computer Is Running Windows 95 ..... 4-1
  - When the Computer Is Not Running Windows 95 ..... 4-2
- Docking the Computer..... 4-3
- Managing System Power ..... 4-4
  - Turning On the System..... 4-4
  - Using the Power Switch ..... 4-4
  - Using the Suspend Button ..... 4-5
- Undocking the Computer..... 4-6
  - Automatic Undocking of the Computer ..... 4-6
  - Manual Undocking of the Computer..... 4-8

## *chapter 5*

### **SECURING THE SYSTEM**

Managing System Security .....	5-1
Locking Components with the Keylock .....	5-2
Locking and Unlocking the Keylock.....	5-3
Replacing a Missing Key.....	5-4
Attaching an Optional Cable Lock.....	5-5

## *chapter 6*

### **CHARGING BATTERY PACKS**

Charging a Battery Pack.....	6-1
Inserting a Battery Pack into a MultiBay.....	6-2
Removing a Battery Pack from a MultiBay.....	6-2

## *chapter 7*

### **USING REMOVABLE DRIVES**

Customizing the Device Bays .....	7-1
Caring for Removable Drives .....	7-2
Adding Drives to the System .....	7-3
Selecting Supported Drives .....	7-3
Combining Drives.....	7-4
Using Drive Adapters.....	7-5
Selecting a Drive Adapter.....	7-5
Obtaining a Drive Adapter.....	7-6
Using a Drive Adapter .....	7-7
Inserting a Drive or Drive Assembly into a MultiBay.....	7-14
Removing a Drive or Drive Assembly from a MultiBay.....	7-15

## *chapter 8*

### **INSERTING AND REMOVING PC CARDS**

Adding a PC Card to the System .....	8-1
Selecting a PC Card Slot .....	8-2
Inserting a PC Card .....	8-2
Removing a PC Card.....	8-4

## *chapter 9*

### **INSTALLING AND REMOVING AN EXPANSION BOARD**

Installing an Expansion Board .....	9-1
Removing an Expansion Board.....	9-9

*chapter 10*

**INSTALLING AND REMOVING A HALF-HEIGHT BAY DEVICE**

Installing a Half-Height Bay Device ..... 10-1

Removing a Half-Height Bay Device..... 10-16

*chapter 11*

**SETTING UP A TOWER SYSTEM**

Preparing to Convert a Desktop System to a Tower System ..... 11-2

Inserting the Desktop Expansion Base  
into an Optional Tower Stand..... 11-3

Docking the Computer in a Tower System ..... 11-4

Adjusting the Width of an Optional Tower Stand ..... 11-6

Completing the Setup..... 11-9

*chapter 12*

**TROUBLESHOOTING**

Quick Solutions Checklist ..... 12-2

Solving Audio Problems..... 12-3

Solving Battery Pack Charging Problems ..... 12-4

Solving Docking and Undocking Problems ..... 12-5

Solving Expansion Board Problems ..... 12-6

Solving External Device Installation Problems..... 12-7

Solving External Keyboard Problems ..... 12-8

Solving External Monitor Problems ..... 12-9

Solving External Pointing Device Problems ..... 12-11

Solving Infrared Problems ..... 12-13

Solving Modem Problems ..... 12-15

Solving PC Card Problems ..... 12-18

Solving Printer Problems..... 12-19

Solving Removable Drive Problems ..... 12-20

Solving USB Problems ..... 12-22

*appendix A*

**COMPAQ CUSTOMER SUPPORT**..... A-1

*appendix B*

**REGULATORY NOTICES** .....B-1

*appendix C*

**ELECTROSTATIC DISCHARGE** .....C-1

*appendix D*  
**SPECIFICATIONS** ..... D-1

*appendix E*  
**CONNECTOR PIN ASSIGNMENTS**..... E-1

**INDEX**.....I-1

## USING THIS GUIDE

Some or all of the following format conventions are used in this guide to distinguish elements of text:

- Names of keys are shown in bold type as they appear on the keyboard, for example, **Ctrl**, **Backspace**, **Tab**.
- Keys that you should press at the same time are represented by the key names and the plus (+) symbol, for example, **Ctrl+Alt+Delete**.
- Commands are presented in lowercase, bold type as shown here: **install** or **a:\install**.
- An arrow symbol is used to separate icons or menu options that you should select in succession, for example, click the Start button→Settings→Control Panel.
- When you need to type information without pressing the **Enter** key, you are directed to “type” the information.
- When you need to type information *and* press the **Enter** key, you are directed to “enter” the information.

**NOTE:** Text set off in this manner presents commentary, sidelights, or interesting points of information.

**IMPORTANT:** Text set off in this manner presents clarifying information or specific instructions.



**WARNING:** Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.

---



**CAUTION:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.

---

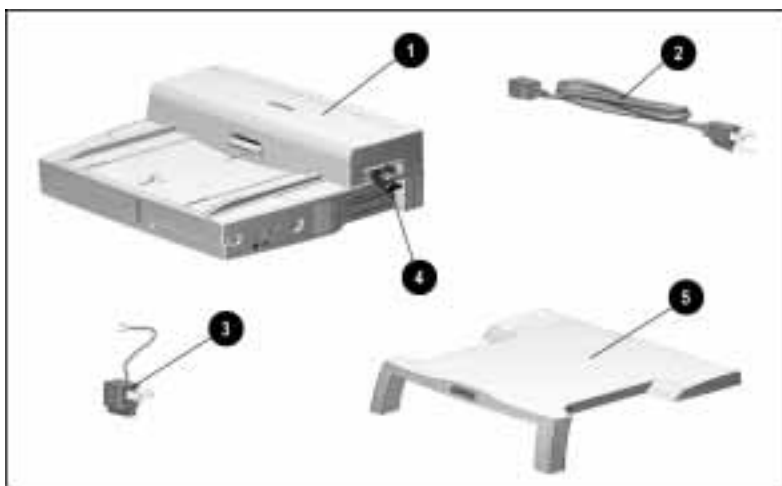


# chapter 1

## GETTING STARTED

### Contents of the Packing Box

Before you begin, make sure you have removed everything from the box. In addition to the Quick Setup poster and documentation about the desktop expansion base, the box contains:








*Contents of the Packing Box*

---

#### Packing Box Contents




---

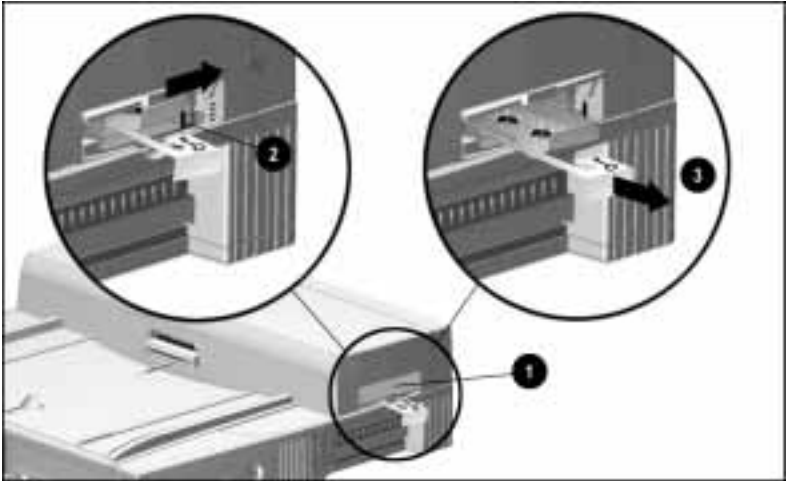
 Desktop expansion base	 Two expansion base keys (shipped inside PC Card slot)
 Expansion base power cord	 Monitor support cover (optional on some models)
 3-to-2-prong plug adapter (Japan only)	

---

# Removing the Keys from the PC Card Slot

To remove the two desktop expansion base keys from the PC Card slot, follow these steps:

1. Open the PC Card door  by swinging it upward from the bottom.
2. Slide the PC Card security post  toward the rear of the expansion base.
3. Remove the key carrier  and keys from the PC Card slot.
4. Close the PC Card door.



*Removing the Keys from the PC Card Slot*

# Installation Requirements

The desktop expansion base can be used with any of the Compaq Armada 7000 Families of Personal Computers.

The expansion base and the computer can be set up as a desktop or tower system.

- A desktop system must include an external keyboard and mouse. For quick set up instructions, refer in this chapter to
  - “Setting Up a Desktop System Without an External Monitor”

or

- “Setting Up a Desktop System with an External Monitor”

**NOTE:** A monitor support cover is included with some ArmadaStation models. To add a monitor support cover to your system as an optional accessory, refer to “Worldwide Telephone Numbers” in Appendix A to contact your nearest Compaq authorized dealer, reseller, or service provider.

- A tower system requires an optional tower stand. For quick setup instructions, refer to Chapter 11, “Setting Up a Tower System.”



# Setting Up a Desktop System Without an External Monitor



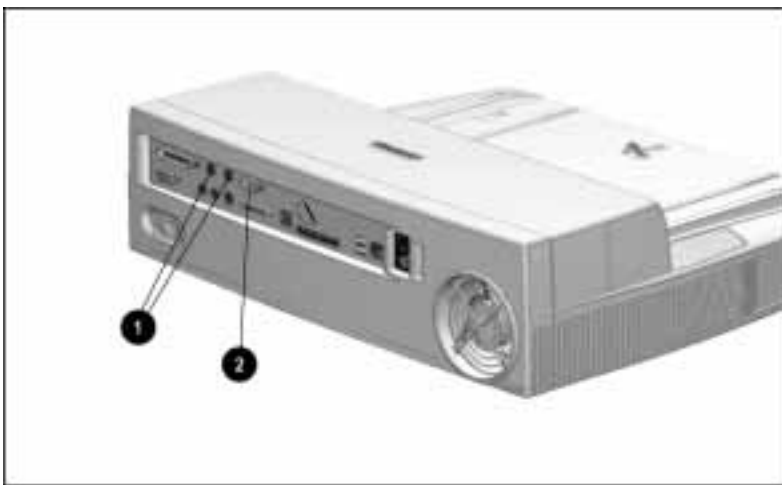
*Desktop System without an External Monitor*

## Connecting the Keyboard and Mouse

To connect the keyboard and mouse to the desktop expansion base, follow these steps:

1. Place the expansion base on a flat surface near an electrical outlet.
2. Connect the keyboard to one of the keyboard/mouse connectors .
3. If you have a PS/2-compatible mouse, connect it to the remaining keyboard/mouse connector. If you have a serial mouse, connect it to the serial connector .




**NOTE:** If you are not certain whether you have a PS/2-compatible or a serial mouse, refer to the documentation that came with the mouse.



*Identifying the Keyboard/Mouse Connectors and the Serial Connector on the Desktop Expansion Base*

## Connecting the Expansion Base Power Cord

To connect the desktop expansion base to electrical power, follow these steps:

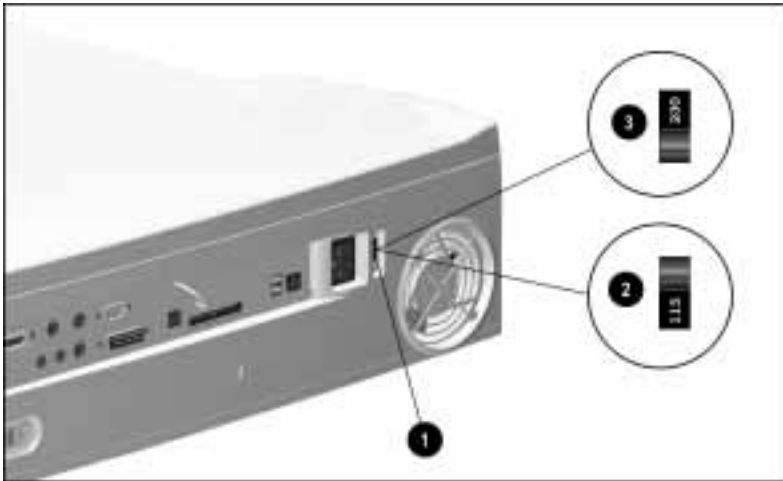
1. Set the voltage select switch  to the voltage supplied by your electrical service provider. When 115 VAC is selected , the number 115 is visible on the red portion of the switch. When 230 VAC is selected , the number 230 is visible.

**NOTE:** To verify the voltage of your electrical supply, contact your electrical service provider.





**CAUTION:** Ensure that the voltage select switch is in the correct position (115 VAC or 230 VAC). Failure to do so will result in damage to the equipment.

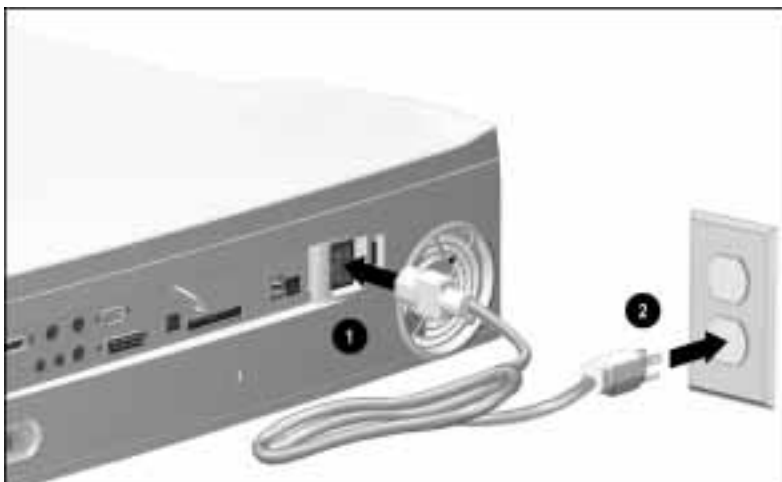
---



*Setting the Voltage Select Switch*

2. Plug the power cord into the power connector  on the expansion base, then into the electrical outlet .

**NOTE:** To plug the expansion base into an outlet in Japan, you must first plug the power cord into the 3-to-2-prong plug adapter included with the expansion base. Ensure that the ground wire is connected to a safe earth ground, then plug the 3-to-2-prong plug adapter into the electrical outlet.



*Plugging In the Desktop Expansion Base*



**WARNING:** To reduce the risk of personal injury, electric shock, fire, or damage to the equipment:

- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Plug the equipment into a grounded (earthed) electrical outlet that is easily accessible at all times.
- Disconnect power from the equipment by unplugging the power cord from the electrical outlet.
- Do not place anything on power cords or cables. Arrange them so that no one may accidentally step on or trip over them. Do not pull on a cord or cable. When unplugging from the electrical outlet, grasp the cord by the plug.

## Docking the Computer



**WARNING:** To avoid the risk of personal injury, keep fingers and hands away from the rear of the computer when docking.






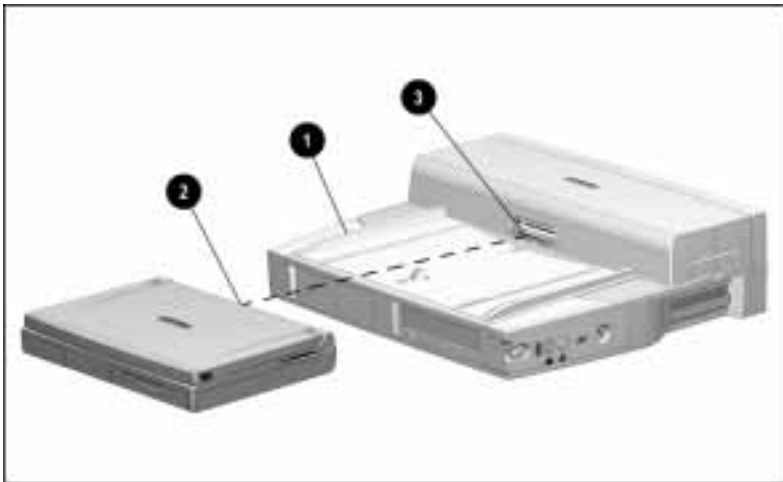
**CAUTION:** Set up a new computer while it is undocked. Do not turn a computer on for the first time while it is docked.

To dock the computer in the desktop expansion base, follow these steps:

1. Turn off the computer, if it is on. If you are not sure whether the computer is off or in Hibernation, turn the computer on, then shut it down.

**NOTE:** For information about docking the computer without shutting it down, refer to “Preparing to Dock the Computer” in Chapter 4.

2. Turn off, then disconnect any external equipment connected to the computer. Disconnect cables to any installed PC Cards. Disconnect the computer power cord.
3. Slide the computer into the expansion base along the left alignment guide .
4. Push the computer toward the rear of the expansion base until the docking connector on the computer  contacts the docking connector on the expansion base . This activates the motorized docking mechanism, which pulls the computer into a fully seated connection.



*Docking the Computer in the Desktop Expansion Base*





## Turning On the System

To turn on power to the system (the desktop expansion base, computer, and connected external devices)

- Slide the power switch on the computer.

or

- Slide the power switch  on the expansion base.

The power/suspend light  on the expansion base turns on when the system is on.



*Turning On the System*

# Setting Up a Desktop System with an External Monitor



*Desktop System with an Optional External Monitor*

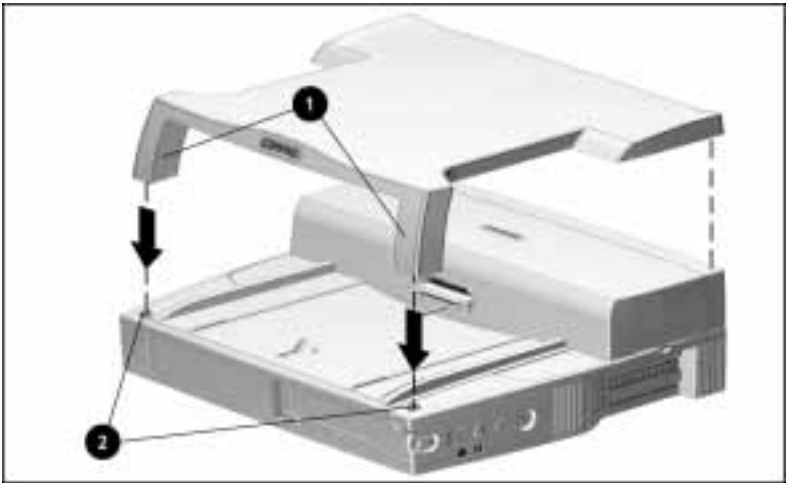
## Installing the Monitor on a Monitor Support Cover



**WARNING:** To avoid the risk of personal injury or structural damage to the monitor support cover, do not place a monitor with an unstable base or a monitor heavier than 55 pounds (25 kilograms) on the support cover. Place the monitor on a work surface next to the docking base.

To install an optional external monitor on a monitor support cover, follow these steps:



1. Ensure that the monitor power switch is turned off.
2. Place the expansion base on a flat surface near an electrical outlet.
3. Place the monitor support cover on the desktop expansion base. Ensure that the legs of the monitor support cover fit securely into the monitor support cover slots.
4. Place the base of the monitor on the flat area toward the rear of the monitor support cover.




*Placing the Monitor Support Cover on the Desktop Expansion Base*

## Connecting the Keyboard, Mouse, and Monitor

To connect the keyboard, mouse, and monitor to the desktop expansion base, follow these steps:

1. Connect the keyboard to one of the keyboard/mouse connectors  on the rear panel of the expansion base.
2. If you have a PS/2-compatible mouse, connect it to the remaining keyboard/mouse connector. If you have a serial mouse, connect it to the serial connector .

**NOTE:** If you are not certain whether you have a PS/2-compatible or a serial mouse, refer to the documentation that came with the mouse.

3. Ensure that the power switch on the external monitor is off.
4. Connect the external monitor cable to the external monitor connector .
5. Plug the external monitor power cord into an electrical outlet.



*Identifying the Keyboard/Mouse Connectors, Serial Connector, and External Monitor Connector on the Desktop Expansion Base*

## Completing the Setup

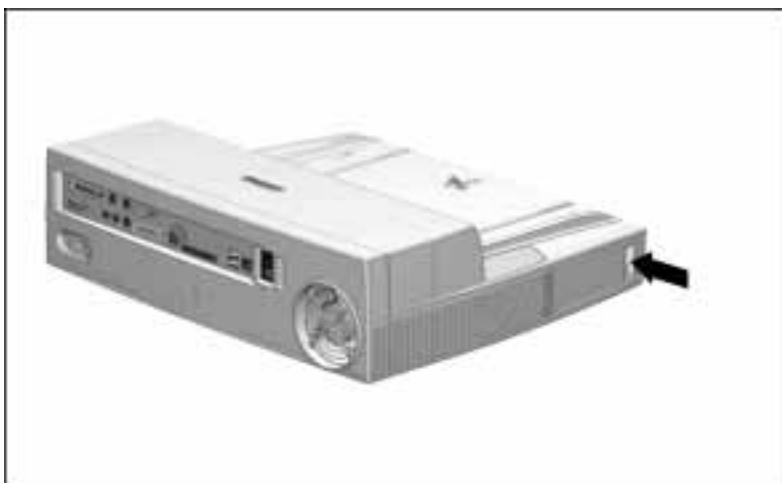
To complete the setup of a desktop system with an external monitor, follow these steps:

1. Turn off the computer, if it is on.
2. Close the computer, if it is open.
3. Follow the procedures in the previous section, “Setting Up the System Without an External Monitor,” for
  - First, “Connecting the Expansion Base Power Cord.”
  - Second, “Docking the Computer.”
  - Third, “Turning On the System.”
4. Turn on the external monitor power switch.

# chapter 2

## IDENTIFYING COMPONENTS

### Left Side Component



*Left Side Component*

---

#### Left Side Component

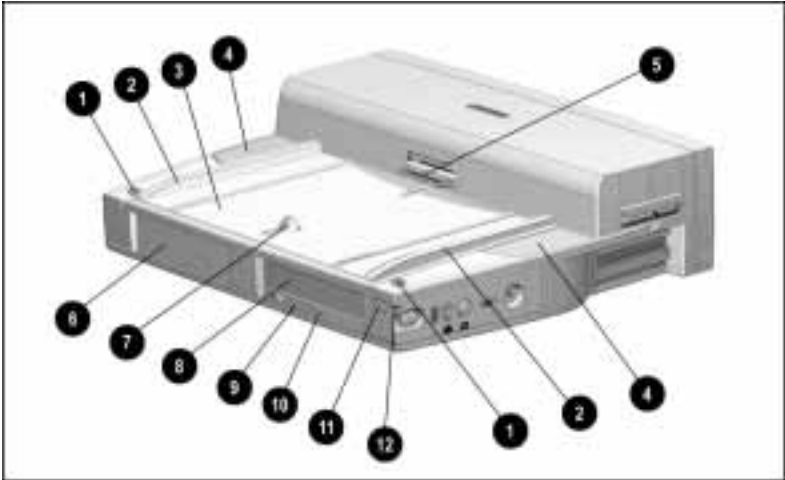
---

Component	Function
Audio bass port	Enhances sound.

---

**IMPORTANT:** The audio bass port molded into the desktop expansion base is an active component of the expansion base audio system. Do not place foreign objects in this opening.

# Front and Top Components



Front and Top Components

## Front and Top Components

Component	Function
❶ Monitor support cover slots (2)	Position monitor support cover.
❷ Alignment guides (2)	Guide computer during docking.
❸ Alignment tray	Positions docked computer.
❹ Stereo speakers (2)	Produce high quality stereo sound.
❺ Docking connector	Connects to docking connector on computer.
❻ Half-height bay	Supports a standard half-height bay device. Can be converted to a second MultiBay or an LTE 5000 MultiBay.
❼ Docking latch	Helps secure computer in the expansion base.

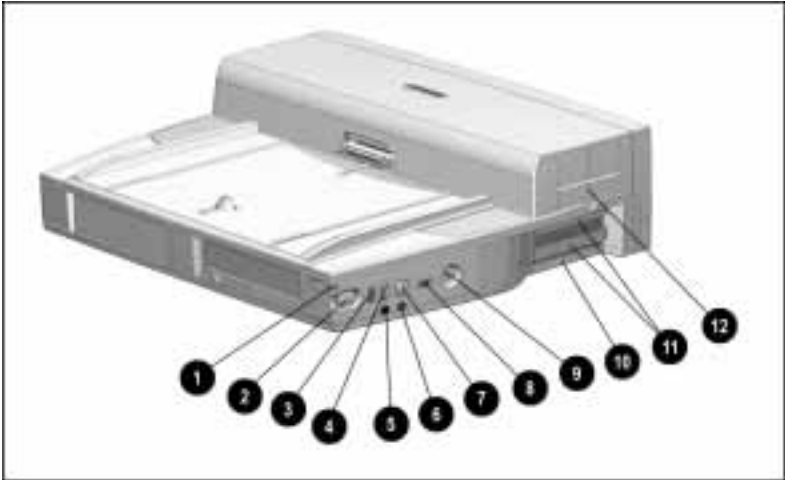
Continued

## Front and Top Components *Continued*

Component	Function
⑧ MultiBay	Supports any MultiBay device that is supported by a computer MultiBay.
⑨ MultiBay device release latch	Releases a device from the MultiBay.
⑩ MultiBay light	Turns on when <ul style="list-style-type: none"><li>■ A removable drive in the MultiBay is being accessed.</li><li>■ A battery pack in the MultiBay is charging. (Turns off when the battery pack is fully charged.)</li></ul>
⑪ Suspend button	When system is off: Turns system on. When system is on: Initiates Suspend. When system is in Suspend: Exits Suspend.
⑫ Power/suspend light	On: System is on. Off: System is off. Blinking: System is in Suspend.



# Right Side Components



Right Side Components

## Right Side Components

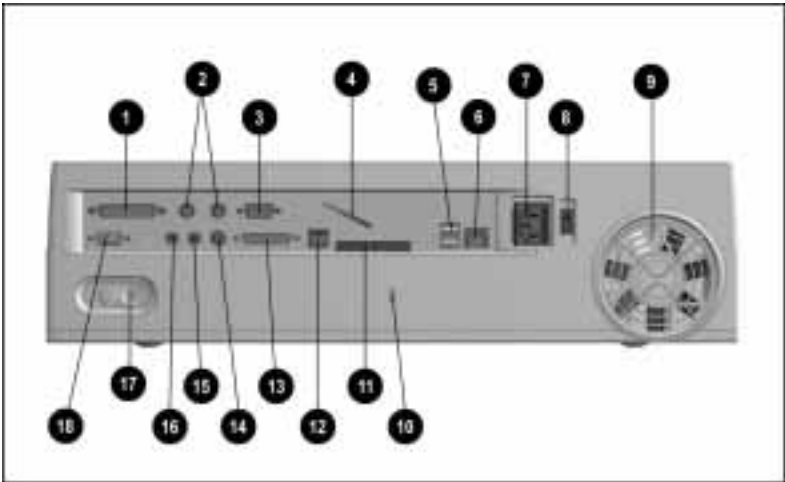
Component	Function
❶ Power/suspend light	On: System is on. Off: System is off. Blinking: System is in Suspend.
❷ Computer eject button	Releases computer from the expansion base.
❸ Infrared port	Links to another IrDA-compliant device for wireless communication. <b>NOTE:</b> This pass-through connector functions only when an infrared-equipped computer is docked.
❹ Volume control	Adjusts volume on <ul style="list-style-type: none"><li>■ Expansion base speakers.</li><li>■ Optional external speakers, headphone, or headset connected to the expansion base.</li></ul>

Continued

## Right Side Components *Continued*

Component	Function
5 Headphone jack	Connects an optional stereo headphone or headset.
6 Microphone jack	Connects an optional single sound channel (monaural) microphone.
7 Mute button	Mutes volume on <ul style="list-style-type: none"><li>■ Expansion base speakers.</li><li>■ Optional external speakers, headphone, or headset connected to the expansion base.</li></ul>
8 Power switch	When computer is docked, turns system power on and off. When computer is not docked, this button is disabled.
9 Keylock	When a computer is docked, can secure <ul style="list-style-type: none"><li>■ The computer to the expansion base.</li><li>■ Removable drives and battery packs in expansion base and computer MultiBays.</li><li>■ A battery pack in a computer battery bay.</li><li>■ PC Cards in the expansion base.</li><li>■ Options that are installed in the expansion base such as expansion boards or a 100BaseTX Ethernet module.</li></ul>
10 Desktop expansion base serial number	Expansion base identification number.
11 Expansion slot covers (2)	Protect slots where optional expansion boards can be installed.
12 PC Card door	Protects PC Card slots (2).

# Rear Panel Components



Rear Panel Components

Rear Panel Components	
Component	Function
❶ Parallel connector	Connects an optional parallel device such as a parallel printer.
❷ Keyboard/mouse connectors (2)	Connect an optional PS/2-compatible device such as a keyboard, mouse, or keypad.
❸ Serial connector	Connects an optional serial device such as a serial mouse.
❹ U-bolt	Attaches an optional security cable to the expansion base. Accommodates thicker cables than the security cable slot.
❺ USB connectors (2)	Connect optional USB devices. <b>NOTE:</b> These USB pass-through connectors function only when a USB-equipped computer is docked.
❻ RJ-45 jack	Connects a 10BaseT Ethernet network. Can be used with a 100BaseTX Ethernet network if an optional 100BaseTX Ethernet Module is installed in the expansion base.
❼ Power connector	Connects external AC power.

Continued

## Rear Panel Components *Continued*

Component	Function
⑧ Voltage select switch	Adjusts expansion base to supplied voltage.
⑨ Fan	Circulates air through the expansion base to cool internal components.
⑩ Security cable slot	Attaches an optional security cable to the expansion base.
⑪ 25-pin connector	The availability and use of this pass-through modem connector varies regionally. Please refer to “Regional Differences” at the end of this chapter.
⑫ RJ-11 jack	The availability and use of this pass-through modem connector varies regionally. Please refer to “Regional Differences” at the end of this chapter.
⑬ MIDI/game connector	Connects an optional joystick or MIDI device.
⑭ External infrared transceiver connector	Connects an optional External Infrared Transceiver. <b>NOTE:</b> This pass-through connector functions only when an infrared-equipped computer is docked.
⑮ Stereo line-in jack	Connects an optional tape recorder, tuner, or CD player.
⑯ Stereo line-out jack	Connects optional external speakers.
⑰ Rear panel release latch	Releases the rear panel of the expansion base, allowing access to the manual release latch and to internal components.
⑱ External monitor connector	Connects an optional external monitor or overhead projector.

## Regional Differences

The desktop expansion base connectors used for modem pass-through vary by region.

- An expansion base purchased for use in North America, Latin America, Japan, or Hong Kong has an RJ-11 connector.
- An expansion base purchased for use in Europe or Asia Pacific (except Japan or Hong Kong) has a 25-pin connector.

# chapter 3

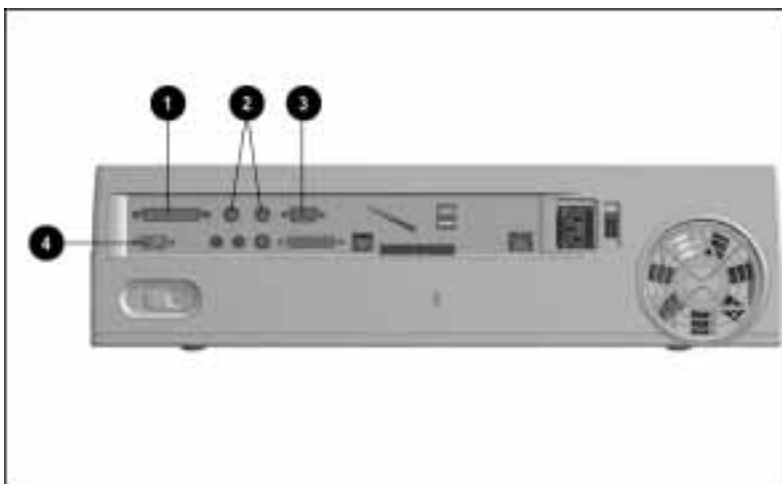
## GETTING CONNECTED

### Connecting an External Device

#### Selecting a Connector

If the device documentation directs to you connect the device to a connector on the computer, you can connect the device to the connector with the same name on the desktop expansion base.

For example, if your printer, keyboard, mouse, numeric keypad, external monitor, or overhead projector documentation instructs you to connect the device to a parallel, PS/2, serial, or external monitor connector on your computer, you can connect the device to the parallel ❶, keyboard/mouse (PS/2) ❷, serial ❸, or external monitor connector ❹ on the expansion base.



*Identifying Connectors*

## Connecting an External Device to the System

To connect an external device to the system, follow these steps:

1. If the computer is docked turn it off.
2. If the external device is on, turn it off, then disconnect it from external power.
3. If the external device is connected to the computer, disconnect it.
4. Connect the external device cable to a connector on the expansion base.
5. If applicable, plug the power cord of the external device into an electrical outlet.
6. If applicable, turn on the power switch of the external device.
7. Turn on the system with the computer power switch or the expansion base power switch.

# Using an External Device in the System

## Audio Equipment

When the computer is docked, the computer speakers are disabled, and sound plays as follows through the desktop expansion base.

Sound Playback	
Connector	Function
① Headphone jack	Connects a headphone or headset. Sound plays in stereo from the headphone or headset.
② Microphone jack	Connects a single sound channel microphone. Sound plays from both expansion base speakers.
③ Stereo line-out jack	Connects external speakers. Sound plays in stereo from the external speakers and from both expansion base speakers.
④ Stereo line-in jack	Connects a tape recorder, tuner, or audio CD-player. Sound plays in stereo from both expansion base speakers.



*Identifying Audio Connectors on the Desktop Expansion Base*



**WARNING:** To reduce the risk of personal injury, turn down the volume control before putting on headphones.

---

### System volume settings

- Are stored in the computer.
- Must be set while the computer is docked.
- Do not affect system beeps.

To turn system sound on or off, toggle the mute button **①**. To adjust volume, press the top or bottom of the volume control **②**.

**NOTE:** To increase volume from an external device, increase both the system volume and the device volume.



*Identifying the Mute Button and Volume Control on the Desktop Expansion Base*



## External Keyboard

The hotkey commands used on the computer keyboard cannot be used on

- An external keyboard used with an Armada 7700 or lower computer model.
- An external keyboard used with an Armada 7800 computer model if a USB driver is loaded into the system and a USB connector is used to connect the keyboard to the system.

To execute a hotkey command from an external keyboard used with an Armada 7800 computer that does not have a USB driver loaded and is not connected by USB, follow these steps:

1. Press the **Scroll Lock** key twice consecutively within a second.
2. Immediately after pressing the **Scroll Lock** key twice, press the second key only of the hotkey combination. For example, if you want to use the **Fn+F4** hotkey command, press the **Scroll Lock** key twice, then press only **F4**.

**NOTE:** If you do not press the second key of a hotkey combination within five seconds after pressing the **Scroll Lock** key twice, you must again press the **Scroll Lock** key twice to reactivate the hotkey command feature.

## External Monitor or Overhead Projector

If an external monitor or overhead projector remains blank after it warms up, toggle the **Fn+F4** hotkey on the computer to switch the display from computer display, to external monitor or overhead projector display, to simultaneous display.

## Joystick or MIDI Device

MIDI software and a MIDI adapter cable are required to operate MIDI-compatible equipment through the desktop expansion base.

To connect a MIDI device to the MIDI/game connector on the expansion base, follow these steps:

1. Connect the MIDI adapter cable to the MIDI device, then to the expansion base.
2. Plug the MIDI device power cord into an electrical outlet.

The MIDI/game connector on the expansion base accommodates a paired MIDI adapter cable with connectors for two devices.

## USB Equipment

The two USB pass-through connectors on the desktop expansion base function only when a USB-equipped computer is docked.

The connectors then function as powered hubs and can support any USB device or combination of USB devices that is supported by the computer.

**NOTE:** When used with an Armada 7800 computer that has a USB driver loaded, an external keyboard connected to a USB connector on the computer or on the expansion base will not support hotkey commands, initiating QuickLock/QuickBlank with **Ctrl+Alt+L**, or exiting QuickLock/QuickBlank with a power-on password.

## Connecting a Modem

The modem connector on the desktop expansion base is a pass-through connector. It functions only when a modem-equipped computer is docked. It supports the same modem speeds and features as the modem in the computer.

- If the expansion base was purchased for use in North America, Latin America, Japan, or Hong Kong, the modem connector is an RJ-11 jack ❶.
- If the expansion base was purchased for use in Europe or Asia Pacific (except Japan or Hong Kong), the modem connector is a 25-pin connector ❷.



*Identifying an RJ-11 Connector or a 25-Pin Connector on the Desktop Expansion Base*

## Connecting an RJ-11 Jack

An RJ-11 jack can be connected to any standard (analog) telephone wall jack, hotel data line, or office fax machine or modem line in North America, Latin America, Japan, or Hong Kong.

The connection requires a telephone cable such as the one included with some integrated modem-equipped computers.

To connect the RJ-11 jack to an analog line, follow these steps:

1. Plug one end of a telephone cable into the RJ-11 jack on the expansion base.
2. Plug the other end of the cable into an analog jack.

## Connecting a 25-Pin Connector

A 25-pin connector can be connected to any standard telephone wall jack in Europe or Asia Pacific.

The connection requires a country-specific modem cable, such as the one included with some integrated modem-equipped computers.

To connect the 25-pin connector to a telephone line, follow these steps:

1. Connect the 25-pin connector on the country-specific modem cable to the 25-pin connector on the expansion base.
2. Plug the other end of the cable into a telephone jack.

**NOTE:** You need a country-specific modem cable for each country in which you want to connect the expansion base. To purchase a country-specific modem cable for use with a 25-pin connector or a telephone cable for use with an RJ-11 jack, refer to “Worldwide Telephone Numbers” in Appendix A for the name of the nearest Compaq authorized dealer, reseller, or service provider.

## Establishing an Infrared Link

The pass-through infrared port ❶ and the pass-through external infrared transceiver connector ❷ on the desktop expansion base function only when an infrared-equipped computer is docked. Both support all the infrared capabilities of the computer.

**NOTE:** Compaq infrared computers are IrDA-compliant (4 Mbps standard). Infrared performance may vary depending on performance of infrared peripherals, distance between infrared devices, and applications used.



*Identifying the Infrared Port and the External Infrared Transceiver Connector on the Desktop Expansion Base*

## Linking with the Infrared Port

When the computer is docked in the desktop expansion base

- The infrared port on the computer is disabled.
- The infrared port on the desktop expansion base is enabled.

To position the infrared port for an infrared link to an IrDA-compliant device, do the following:

- Ensure that no objects block the line-of-sight path between the infrared ports.
- Position the two devices so that the infrared ports face each other at a distance no greater than 1.5 feet (about 0.5 meter).
- Aim the ports directly at each other. The maximum capture angle is 30 degrees. Do not point one port more than 15 degrees off the center line from the other port.
- Shield the ports from direct sunlight, flashing incandescent light, and energy-saving fluorescent light.
- During a transmission
  - ❑ Do not allow remote control units, such as wireless headphones or other audio devices, to point at the ports.
  - ❑ Do not disrupt the infrared beam.
  - ❑ Do not move the devices.



*Transmitting Data from the System to Another IrDA-Compliant Computer*

## Linking with an Optional External Infrared Transceiver

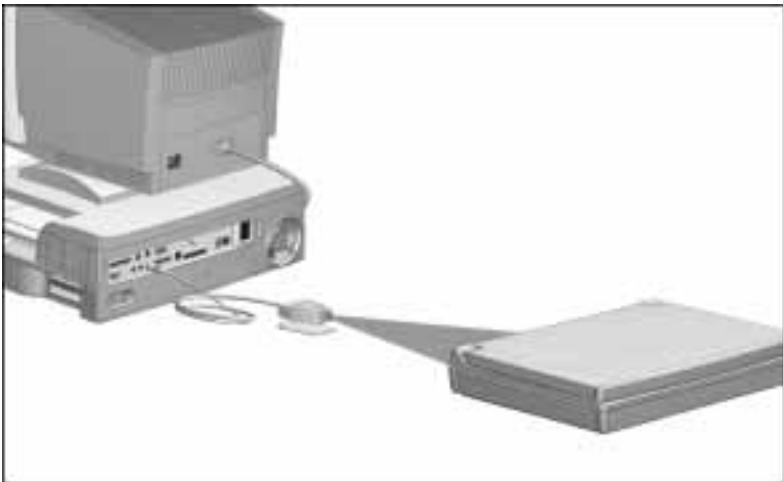
You can use an optional External Infrared Transceiver to

- Adjust the direction of infrared transmissions without moving the desktop expansion base.
- Increase the distance of infrared transmissions by the length of the transceiver cable.

When an optional External Infrared Transceiver is connected to the desktop expansion base

- The infrared ports on the computer and the expansion base are disabled.
- The external infrared transceiver connector on the expansion base is enabled.

To connect an External Infrared Transceiver to the system, connect the transceiver cable to the external infrared transceiver connector on the expansion base.



*Using an Optional External Infrared Transceiver*

# Connecting to an Ethernet Network

To connect the system to a 10BaseT Ethernet network

- First, connect the system to the network with a network cable.
- Second, install the drivers for your operating system.

To connect the system to a 100BaseTX Ethernet network, you must first install an optional 100BaseTX Ethernet Module. For information, refer to “Worldwide Telephone Numbers” in Appendix A for a Compaq authorized dealer, reseller, or service provider near you.

**NOTE:** Installing an optional 100BaseTX Ethernet Module in a system connected to a 10BaseT Ethernet network will not affect system or network speed.

## Connecting a Network Cable

This connection requires an unshielded twisted pair cable with RJ-45 jacks at each end. Request the cable from your network administrator or authorized service provider.

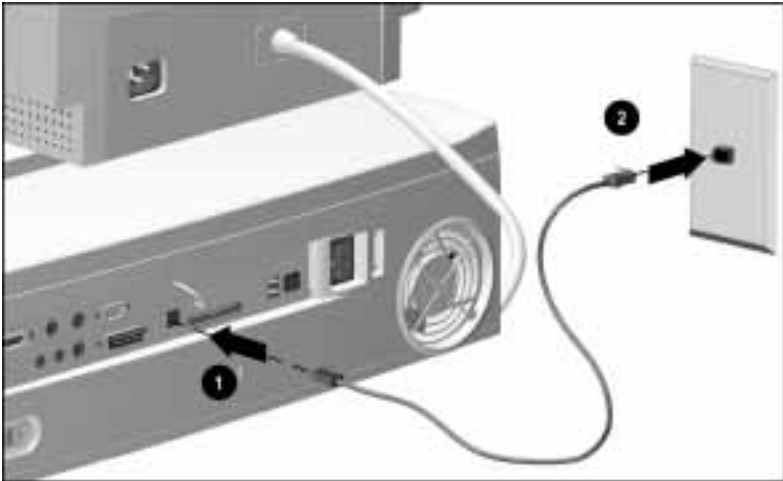


**WARNING:** To reduce the risk of electric shock, fire, or damage to the equipment, do not plug a telephone cable into the Ethernet RJ-45 jack.

---

To connect the cable to the desktop expansion base and the network jack, follow these steps:

1. Connect the cable to the RJ-45 **❶** jack on the expansion base.
2. Connect the other end of the cable to the network jack **❷**.



*Connecting the System to an Ethernet Network*



## Installing Network Drivers

Before you can log onto the network, network drivers specific to your computer model and operating system must be installed.

- If you are running Windows 95 on an Armada 7800 computer model, network drivers are preinstalled.
- If you are running Windows NT on an Armada 7800 computer model, you must install network drivers.
- If you are using an Armada 7700 or an Armada 7300 computer model, you must update the network drivers preinstalled on your computer.

**NOTE:** For configuration information specific to your network, consult your Network Administrator.

## Obtaining Drivers

You can obtain network drivers and instructions for installing them from the

- CPQNET directory preinstalled on some computers at C:\CPQNET.
- Compaq Internet site at [www.compaq.com](http://www.compaq.com).
- *Compaq Support Software CD*.
- *Armada Integrated Netflex-3 Ethernet Drivers Diskettes 1 and 2*. These diskettes are included with your ArmadaStation. They contain network drivers for
  - Armada 7800 computer models running Windows 95.
  - All Armada 7700 computer models.
  - All Armada 7300 computer models.

**NOTE:** To ensure that you install the latest drivers for your operating system, go to the Compaq Internet site or refer to “Worldwide Telephone Numbers” in Appendix A for information about contacting your nearest Compaq dealer, reseller, or service provider to obtain the latest *Compaq Support Software CD*.

## Installing Drivers from CPQNET

To access the network drivers and installation instructions in the CPQNET directory, follow these steps:

1. Connect the desktop expansion base to the network with a network cable.  
**NOTE:** For connection instructions, refer to the previous section, "Connecting a Network Cable."
2. Dock the computer.
3. Turn on the system with the power switch on the computer or the power switch on the expansion base.
4. Open the CPQNET directory.
5. Open the subdirectory for the network operating system used on the computer.
6. Open the Readme.txt file in the subdirectory.
7. Follow the instructions in the Readme.txt file for installing drivers for the Compaq Integrated Netflex-3 Controller.

# *chapter* 4

## DOCKING AND UNDOCKING

### Preparing to Dock the Computer

#### When the Computer Is Running Windows 95

If the computer is running Windows 95, you can dock while the computer is on, off, or in Suspend or Hibernation.

#### Docking While the Computer Is On or in Suspend

- If the computer is docked while it is in Suspend, the desktop expansion base turns on the computer and your information returns to the screen.
- If the computer is docked while it is on or in Suspend, the system recognizes most drives, PC Cards, and expansion boards installed in the expansion base.

**NOTE:** If the system does not recognize a particular drive, PC Card, or expansion board, restart the computer after it is docked.

#### Docking While the Computer Is in Hibernation



**CAUTION:** Docking a computer that is in Hibernation can result in the loss of unsaved information.

---

If the computer is docked while in Hibernation:

- Any battery packs in the computer begin to charge.
- The system will not recognize devices installed in the expansion base until the computer is restarted.
- A Hibernation prompt appears on the screen.

The Hibernation prompt asks whether you want to restart the computer and lose unsaved data or to abort the docking process and preserve unsaved data.

- To restart the computer, press **F1**.
- To exit Hibernation and return your work to the screen, follow these steps:
  1. Press **F2**.
  2. Undock the computer.
  3. Plug the computer into an external power source.
  4. Turn on the computer by sliding the power switch.

### **When the Computer Is Not Running Windows 95**

If the computer is running an operating system other than Windows 95, turn off the computer before you dock it.

**NOTE:** If you dock a computer running Windows NT 4.0 while it is in Suspend, the desktop expansion base will turn on the computer, but the system will not recognize any drives, PC Cards, or expansion boards installed in the expansion base until you restart the computer.

# Docking the Computer



**WARNING:** To avoid the risk of personal injury, keep fingers and hands away from the rear of the computer when docking.

---



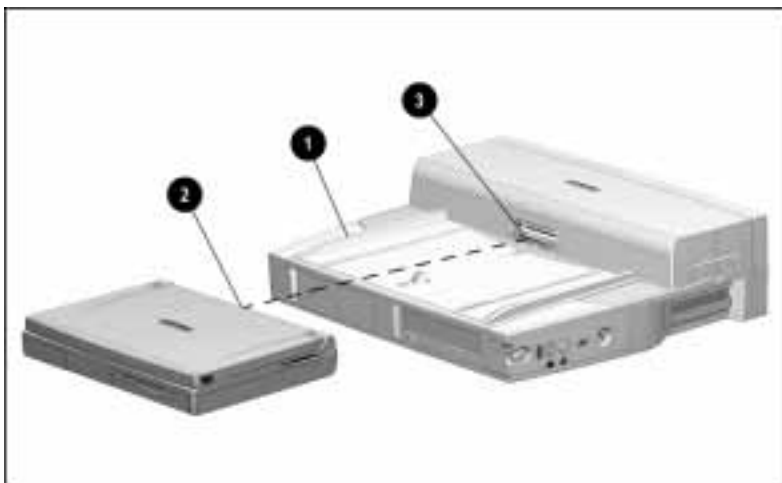
**CAUTION:** Do not turn the computer on for the first time while it is docked.

---

Compaq recommends that you save and close all files and applications before docking.

To dock the computer in the desktop expansion base, follow these steps:

1. Turn off the computer, unless it is running Windows 95.
2. Turn off then disconnect any external equipment connected to the computer. Disconnect cables to any installed PC Cards.
3. Slide the computer into the expansion base along the left alignment guide ❶.
4. Push the computer toward the rear of the expansion base until the docking connector on the computer ❷ contacts the docking connector on the expansion base ❸. This activates the motorized docking mechanism, which pulls the computer into a fully seated connection.



*Docking the Computer in the Desktop Expansion Base*

# Managing System Power

## Turning On the System

If you dock a computer while it is off, you can turn the system on by

- Sliding the power switch on the computer.
- Sliding the power switch ❶ on the desktop expansion base.
- Pressing the suspend button ❷ on the desktop expansion base.

The power/suspend light ❸ on the expansion base turns on when the system is on, turns off when the system is off, and blinks when the system is in Suspend.



*Identifying the Power Switch, Suspend Button, and Power/Suspend Light on the Desktop Expansion Base.*

## Using the Power Switch

The power switch does *not* turn the expansion base on and off. The expansion base is on whenever it is connected to external power.

- When a computer is docked, the power switch turns the system (the computer, the expansion base, and all connected external devices) on and off.
- When no computer is docked, the power switch does not function.

## Using the Suspend Button

The suspend button functions only when a computer is docked.

You can use the suspend button on the expansion base as you do the suspend button on the computer in these ways:

- When the system is on, press the suspend button to initiate Suspend.
- When the system is in Suspend, press the suspend button to exit Suspend.

The suspend button on the expansion base differs from the suspend button on the computer in these ways:

- If you have docked a computer while it is off, pressing the suspend button on the expansion base turns the system on.
- The suspend button on the expansion base cannot be used with the **Fn** key on the computer keyboard to initiate Hibernation.

**NOTE:** Because power is continuously available to a docked computer, Hibernation cannot be initiated while the computer is docked.

# Undocking the Computer

## Automatic Undocking of the Computer

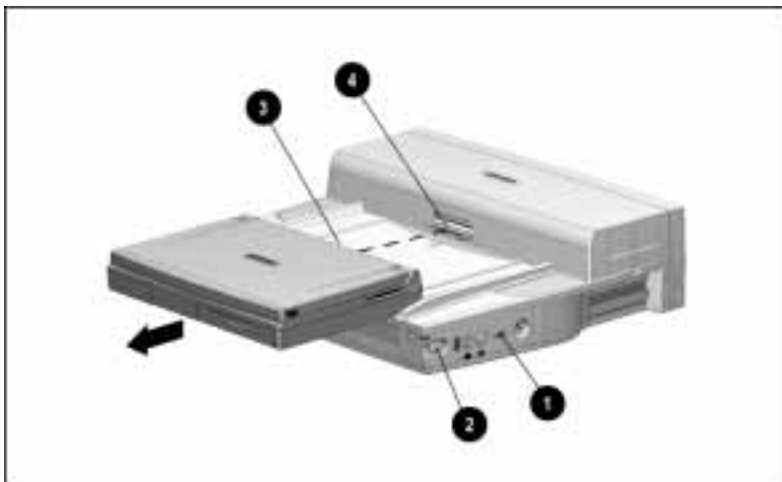
To undock the computer from the desktop expansion base using the motorized undocking mechanism, follow these steps:

1. Unlock the expansion base keylock if it is locked.

**NOTE:** For keylock information, refer to Chapter 5, “Securing the System.”

2. Turn off the computer, if necessary, by sliding the power switch on the computer or the power switch ❶ on the expansion base.
  - If the computer is running Windows 95, you can undock the computer while it is on, off, or in Suspend.
  - If the computer is running an operating system other than Windows 95, turn off the computer before you undock it.
3. Turn off then disconnect any external equipment connected to the computer. Disconnect cables to any installed PC Cards.
4. Close the computer, if it is open.
5. Press the computer eject button ❷ on the expansion base. This activates the motorized docking mechanism, which pushes the computer away from the expansion base and disconnects the docking connector on the computer ❸ from the docking connector on the expansion base ❹.





*Undocking the Computer from the Desktop Expansion Base*

**NOTE:** If you press the computer eject button immediately after shutting down a computer running Windows 95, there may be a slight delay before the computer is pushed away from the expansion base. Windows 95 uses this time to perform a safe shutdown of the system.

6. When the undocking process is complete, slide or lift the computer out of the expansion base.

## Manual Undocking of the Computer

The motorized undocking mechanism requires electricity. If power becomes unavailable to the desktop expansion base while the computer is docked, you can release the computer from the expansion base by using the manual release latch behind the rear panel of the expansion base.

### Before You Begin

To prepare the system for a manual release, follow these steps:

1. Remove the external monitor and monitor support cover, if applicable.
2. Save all files and applications, then turn off the computer.
3. Unlock the expansion base keylock, if applicable.

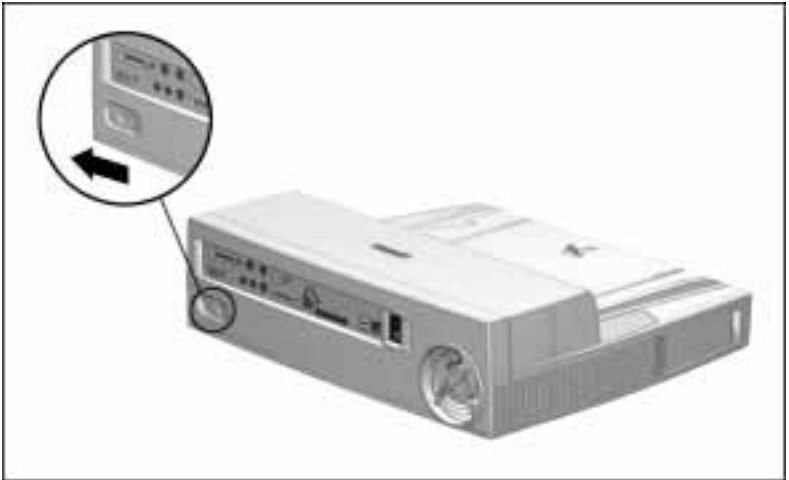
**NOTE:** For keylock information, refer to Chapter 5, “Securing the System.”

4. Turn off all external devices connected to the expansion base.
5. Disconnect all cables and the power cord from the expansion base.

## Removing the Rear Panel

To remove the rear panel, follow these steps:

1. Position the expansion base with the rear panel facing you.
2. Slide the rear panel release latch left to the open position.



*Sliding the Rear Panel Release Latch to Release the Rear Panel*

3. Using both hands, grasp the bottom sides of the rear panel and swing the bottom out and up until it disengages.

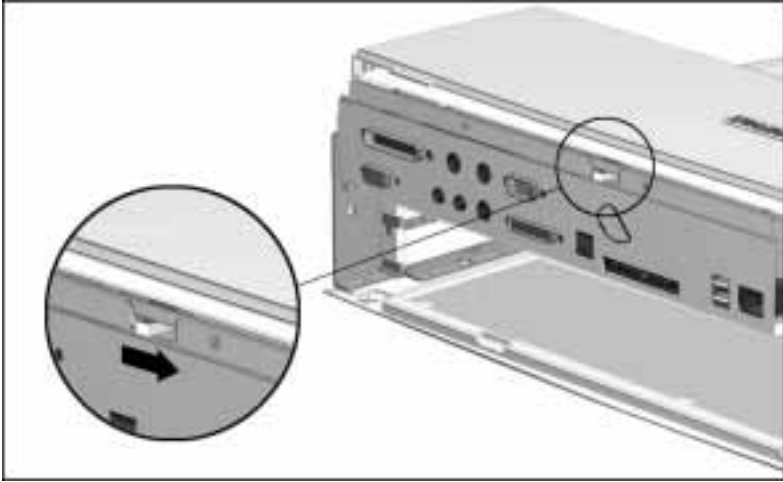


*Removing the Rear Panel*

4. When you feel the rear panel detach from the top cover of the expansion base, lift it up and away from the expansion base.

## Releasing the Computer from the Desktop Expansion Base

1. Slide the manual release latch to the right.



*Sliding the Manual Release Latch to the Right*

2. Pull the computer away from the expansion base along the left alignment guide.
3. Replace the rear panel by inserting the tabs on the top of the rear panel into the slots in the top cover. When the tabs are in the slots, pivot the bottom of the rear panel downward until it is seated.
4. Secure the rear panel by moving the rear panel release latch right to the closed position.
5. Reconnect the power cord and all external device cables to the expansion base.

# *chapter* 5

## SECURING THE SYSTEM

### **Managing System Security**

The computer, the desktop expansion base, and most removable devices installed in them can be locked together with the keylock.

The system can then be secured to a fixed or heavy object with an optional cable lock.

When the expansion base is locked with the keylock

- A computer can be docked without unlocking the keylock. This feature enables you to access data in expansion base drives even if you have misplaced your expansion base key(s).
- A computer cannot be undocked until the keylock is unlocked. This feature prevents an unauthorized user from accessing expansion base data without your knowledge.

Two keys to the expansion base keylock ship inside the PC Card slot. The keys are identical; the second is included as a spare.

# Locking Components with the Keylock

Locking the keylock secures the system as follows:

- The motorized undocking mechanism is disabled.
- The computer is anchored to the expansion base by the docking latch.
- The MultiBay device release latches on any MultiBays and battery bays in the computer and the expansion base are disabled.
- The PC Card security post on the expansion base is locked in place.
- The rear panel release latch is disabled. This denies access to
  - Any expansion boards installed in the expansion base.
  - A 100BaseTX Ethernet Module or other component installed on the input/output (I/O) board of the expansion base.
  - The manual release latch used to manually disconnect the computer from the expansion base.

Locking the keylock does not secure the following items:

- PC Cards in the computer.
- Diskettes or CDs in the computer or the expansion base.

## Locking and Unlocking the Keylock

To lock or unlock the system with the keylock, follow these steps:

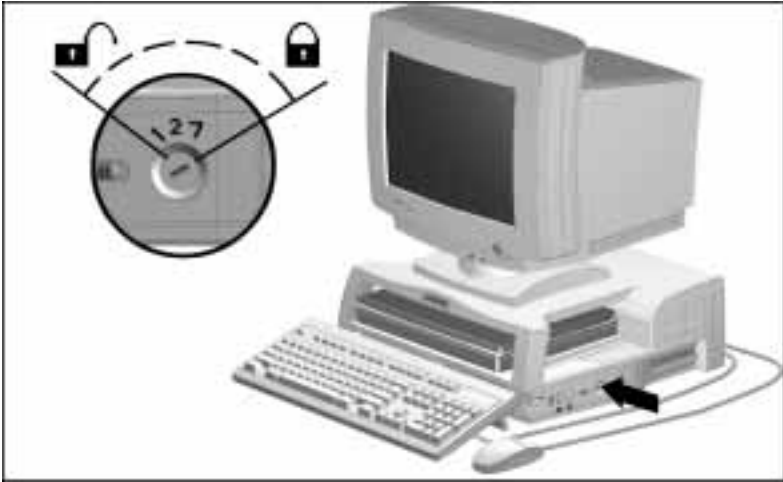
1. If you are locking the system and want to secure a PC Card installed in the expansion base, position the PC Card security post so that it blocks access to the PC Card slots.



*Positioning the PC Card Security Post*

**NOTE:** The keylock locks the PC Card security post in its current position. If the system is locked while the PC Card security post is in front of the PC Card slots, installed PC Cards are secured. If the system is locked while the security post is on the far right of the PC Card slots, installed PC Cards are not secured.

2. Insert the key in the keylock.
3. Turn the key 120 degrees clockwise to lock the system. Turn the key 120 degrees counterclockwise to unlock the system.



*Desktop Expansion Base Keylock*

## **Replacing a Missing Key**

To replace a missing key, contact the Fort Lock Corporation:

Fort Lock Corporation  
3000 North River Road  
River Grove, IL 60171  
(708) 458-1100

Report the loss and the numbers on your keylock, and your key will be replaced.



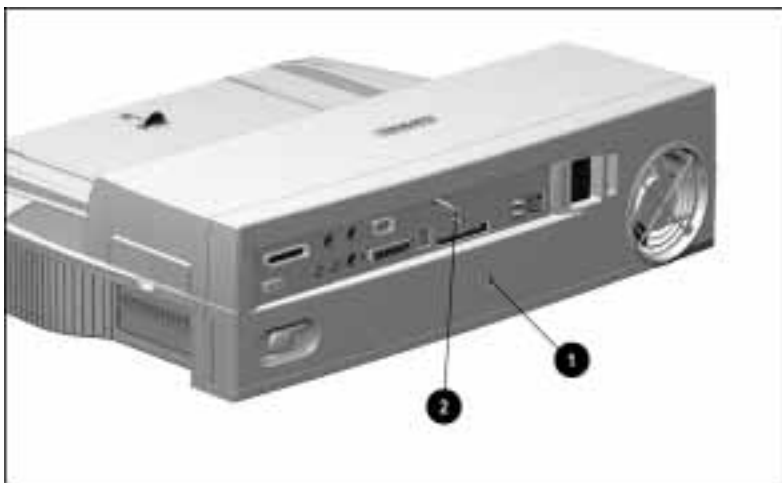
## Attaching an Optional Cable Lock

To connect a Kensington Cable lock to the security cable slot **❶**, follow the instructions included with the lock.

**NOTE:** A Kensington MicroSaver Security System cable lock (Model 64068) is available from Kensington Microware Ltd. or major resellers worldwide.

To connect a larger cable to the U-bolt **❷**, follow these steps:

1. Ensure that one end of the cable fits through the U-bolt.
2. Loop the cable around a fixed or heavy object.
3. Extend one end of the cable through the U-bolt.
4. Lock the ends of the cable together using an external padlock or the locking device attached to the cable.



*Attachments for an Optional Cable Lock*

# chapter 6

## CHARGING BATTERY PACKS

### Charging a Battery Pack

A battery pack begins to charge as soon as it is inserted into a desktop expansion base MultiBay when

- The computer is not docked.
- The computer is docked and does not contain any other battery packs that are waiting to be charged.

If the docked computer contains other battery packs that are waiting to be charged, all battery packs in the system charge in the sequence described in your computer documentation.

While a battery pack is charging in an expansion base MultiBay, the expansion base MultiBay light turns on. When the battery pack is fully charged, the MultiBay light turns off.

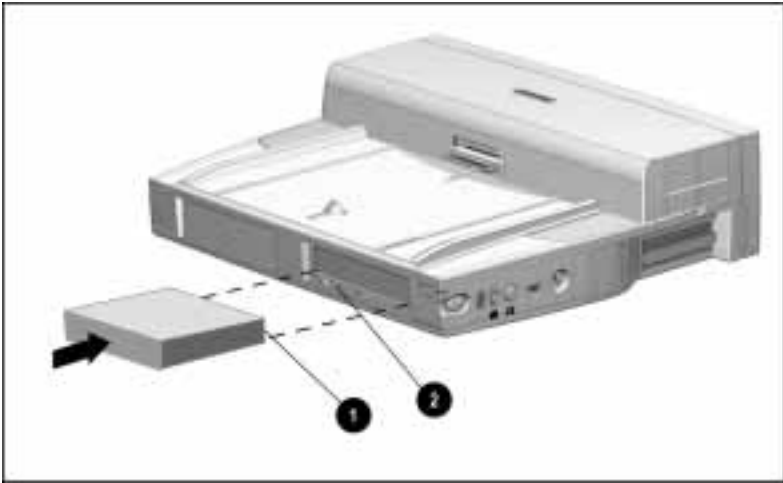


*Location of the MultiBay Light*

## Inserting a Battery Pack into a MultiBay

To insert a battery pack into a desktop expansion base MultiBay, follow these steps:

1. Determine the model of the battery pack.
  - An Armada 7700 battery pack has a rectangular label that partially covers the top of the battery pack.
  - An Armada 7300 battery pack has a large label that covers the top of the battery pack.
2. Unlock the expansion base keylock.
3. Insert the battery pack with the connector ❶ facing in.
  - Insert an Armada 7700 battery pack *label side up*.
  - Insert an Armada 7300 battery pack *label side down*.
4. Push the battery pack into the MultiBay until it is seated and the MultiBay device release latch ❷ slides to the right.



*Inserting a Battery Pack into a Desktop Expansion Base MultiBay*

## Removing a Battery Pack from a MultiBay

To remove a battery pack from an expansion base MultiBay, follow these steps.

1. Unlock the expansion base keylock.
2. Slide the MultiBay device release latch to the left.
3. Pull the battery pack out of the MultiBay.

## USING REMOVABLE DRIVES

### Customizing the Device Bays

The desktop expansion base has two standard half-height bays. Both can support any removable device that is supported by the computer.

- The right bay is converted to a MultiBay.
  - ❑ A removable Armada 7000 Half-Height MultiBay Adapter is preinstalled in this bay.
  - ❑ To convert this bay to an LTE 5000 MultiBay, replace the Armada 7000 MultiBay Adapter with an optional LTE 5000 Half-Height MultiBay Adapter.
  - ❑ To convert this bay to a half-height drive bay, replace the Armada 7000 MultiBay Adapter with an optional half-height drive.
- The left bay is vacant.
  - ❑ To convert this bay to a second MultiBay, install an optional Armada 7000 Half-Height MultiBay Adapter.
  - ❑ To convert this bay to an LTE 5000 MultiBay, install an optional LTE 5000 Half-Height MultiBay Adapter.
  - ❑ To convert this bay to a half-height drive bay, install an optional half-height drive.
- Expansion base half-height bays as shipped support IDE devices only. To use a SCSI device externally or in a half-height bay, install a SCSI controller.

For information about installing a half-height bay device, refer to Chapter 10, “Installing and Removing a Half-Height Bay Device.” For information about installing a SCSI controller, refer to Chapter 9, “Installing and Removing an Expansion Board.”

# Caring for Removable Drives

Removable drives are fragile components that must be handled with care.



**CAUTION:** To prevent damage to the computer, damage to a removable drive, or loss of information, observe these precautions:

- Before removing or inserting a hard drive, shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, then shut it down.
  - Before removing a diskette drive, ensure that a diskette is *not* in the drive.
  - Before removing a CD-ROM drive, ensure that a compact disc is *not* in the drive and that the CD-ROM tray is closed.
  - Before handling a drive, ensure that you are discharged of static electricity. While handling a drive, avoid touching the connector. For more information about preventing electrostatic damage, refer to Appendix C.
  - Handle a drive carefully; do not drop it.
  - Avoid exposing a hard drive to products that have magnetic fields such as monitors or speakers.
  - Avoid exposing a drive to temperature extremes.
  - Avoid exposing a drive to liquids. Do not spray it with cleaners.
  - Do not use excessive force when inserting a drive into a drive bay.
  - If a drive must be mailed, place the drive into a bubble-pack mailer or other suitable protective packaging and label the package "Fragile: Handle With Care."
-

# Adding Drives to the System

## Selecting Supported Drives

- A desktop expansion base MultiBay can accommodate
  - Any drive that can be used in any computer in the Armada 7000 Family of Personal Computers.
  - Any secondary-capable hard drive that can be used in an LTE 5000 or LTE Elite computer model.
- An expansion base LTE 5000 MultiBay can accommodate
  - Any diskette or CD-ROM drive that can be used in an LTE 5000 computer model.
  - Any secondary-capable hard drive that can be used in an LTE 5000 or LTE Elite computer model.

A secondary-capable hard drive that can be used in an LTE 5000 or LTE Elite computer model displays this symbol:



A secondary-capable hard drive displaying this symbol can be used in the expansion base to store or transfer data files. However, because drivers for these hard drives are not preinstalled on the computer, you cannot start (boot) the system from them.

**NOTE:** You can prevent an accidental startup from a secondary-capable hard drive by disabling MultiBoot. For instructions, refer to the Boot Management section of your computer documentation.



**CAUTION:** Attempting to boot from a hard drive that can be used in an LTE 5000 or LTE Elite computer can result in loss of data and damage to the system.

## Combining Drives

The system (the desktop expansion base, computer, and all connected devices) supports any combination of drives and drive locations except the following: No more than two diskette drives can be supported at one time. The two diskette drives can be inserted in any two bays in the system.

# Using Drive Adapters

## Selecting a Drive Adapter

Some removable drives must be inserted into adapters or carriers before being inserted into an expansion base MultiBay or LTE 5000 MultiBay. Refer to the following table to determine what adapters are needed to insert drives into your expansion base bays.

Selecting a Drive Adapter			
To insert this drive	Which can be used in this computer	Into this expansion base bay	Use this adapter
CD-ROM drive	Armada 7800 Armada 7700	MultiBay	None
Diskette drive	Armada 7800 Armada 7700	MultiBay	None
Hard drive	Armada 7800 Armada 7700 Armada 7300	MultiBay	Armada 7000 Hard Drive MultiBay Adapter*
CD-ROM drive	Armada 7300	MultiBay	Armada 7000 Removable Drive MultiBay Adapter
Diskette drive	Armada 7300	MultiBay	Armada 7000 Removable Drive MultiBay Adapter
Secondary-capable hard drive	LTE 5000	MultiBay	Armada 7000 Hard Drive MultiBay Adapter
		LTE 5000 MultiBay	LTE 5000 MultiBay Hard Drive Carrier
CD-ROM drive	LTE 5000	LTE 5000 MultiBay	None
Diskette drive	LTE 5000	LTE 5000 MultiBay	None
Secondary-capable hard drive	LTE Elite	MultiBay	Armada 7000 Hard Drive MultiBay Adapter
*A hard drive that can be used in an Armada 7300 computer model can also be used with an Armada 7000 Removable Drive MultiBay Adapter: First insert the drive into an Armada 7300 Hard Drive MultiBay Adapter, then insert the drive assembly into the Armada 7000 Removable Drive MultiBay Adapter.			

## Obtaining a Drive Adapter

For information about purchasing any of the drive or bay adapters mentioned in this guide from a Compaq authorized dealer, reseller, or service provider, refer to “Worldwide Telephone Numbers” in Appendix A.

- An Armada 7000 Removable Drive MultiBay Adapter is included with the purchase of
  - A CD-ROM drive that can be used in an Armada 7300 computer model.
  - An Armada 7300 computer model that includes a CD-ROM drive.
- An Armada 7300 Hard Drive MultiBay Adapter is included with the purchase of a hard drive that can be used in an Armada 7300 computer model.
- An LTE 5000 MultiBay Hard Drive Carrier is included with the purchase of a hard drive that can be used in an LTE 5000 computer model.

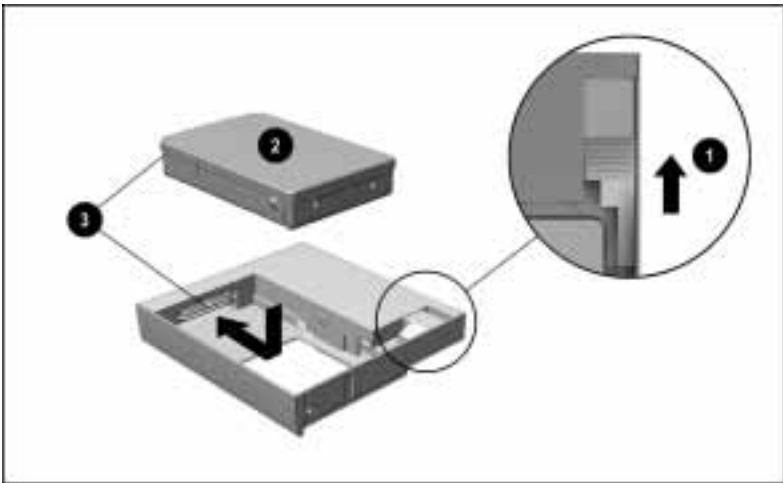


## Using a Drive Adapter

### Armada 7000 Hard Drive MultiBay Adapter

#### *To insert a hard drive into an Armada 7000 Hard Drive MultiBay Adapter*

1. If the hard drive is in a packing or storage tray, remove it from the tray and from any other packing materials.
2. Push the slide tab back ❶.
3. Place the hard drive ❷ into the adapter with the connector facing in.
4. Slide the hard drive toward the connector ❸ in the adapter until both connectors are fully engaged.
5. Release the slide tab.



*Placing a Hard Drive in an Armada 7000 Hard Drive MultiBay Adapter*

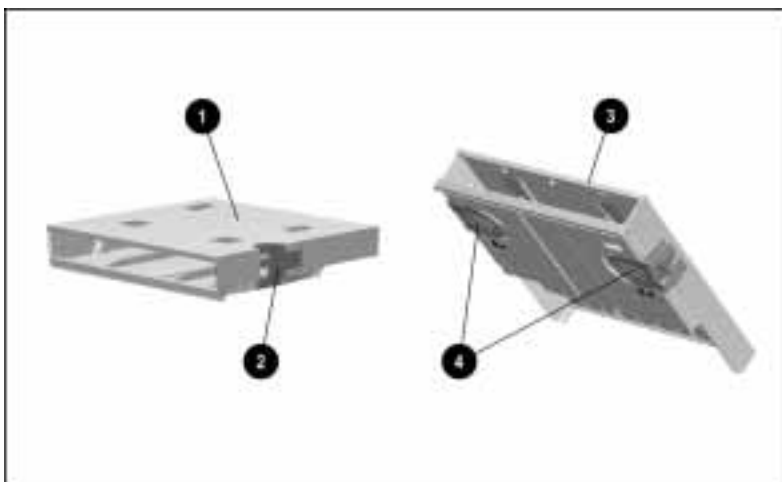
#### *To remove a hard drive from an Armada 7000 Hard Drive MultiBay Adapter*

1. Push the slide tab back to release the hard drive.
2. Pull the drive away from the connectors, then lift it out of the adapter.

## Armada 7000 Removable Drive MultiBay Adapter

The Armada 7000 Removable Drive MultiBay Adapter is available in two models. To insert or remove a drive from this adapter:

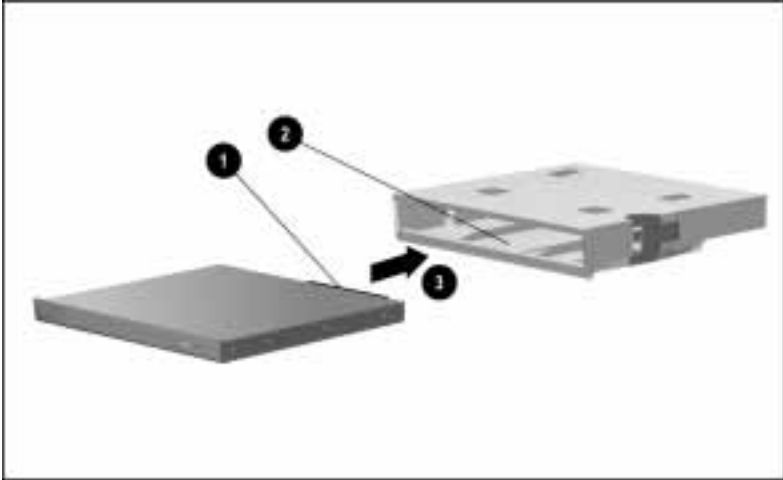
- First, determine whether you have a model with one release latch or two release latches.
  - ❑ The one-latch model ❶ has one release latch ❷ on the right side.
  - ❑ The two-latch model ❸ has two release latches ❹ on the bottom.
- Second, refer to the insertion or removal instructions on the following pages for the model you are using.



*Identifying the One-Latch and Two-Latch Models of the Armada 7000 Removable Drive MultiBay Adapter*

***To insert a drive into an Armada 7000 Removable Drive MultiBay Adapter with one release latch***

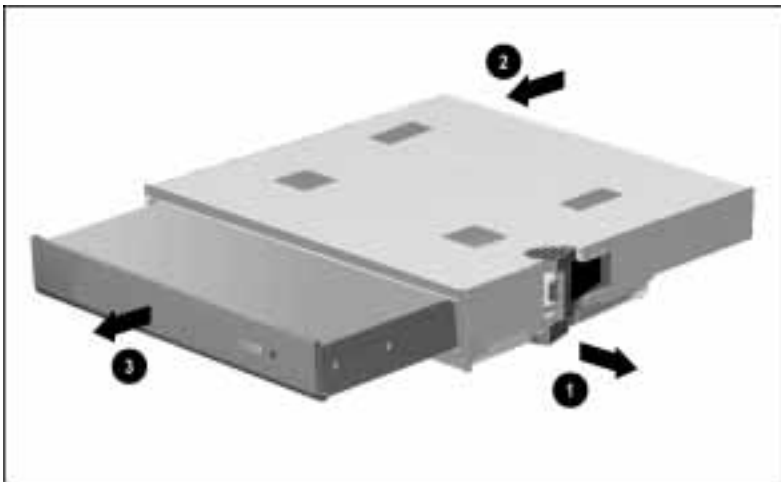
1. Hold the drive with the connector **❶** on the right facing the front **❷** of the adapter.
2. Slide the drive into the adapter **❸** until the front of the drive is flush with the front of the adapter.



***Inserting a Drive into an Armada 7000 Removable Drive MultiBay Adapter with One Release Latch***

***To remove a drive from an Armada 7000 MultiBay Adapter with one release latch***

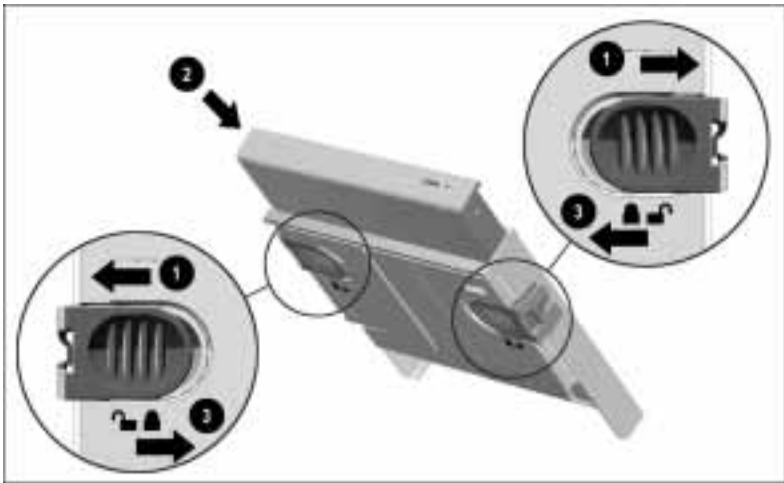
1. Apply light pressure to both the top and bottom of the release latch on the right side of the adapter and pull it out slightly ❶.
2. Push forward on the back of the drive ❷ (without touching the connector) until you can grasp the front of the drive.
3. Slide the drive out of the adapter ❸.



*Removing a Drive from an Armada 7000 Removable Drive MultiBay Adapter with One Release Latch*

***To insert a drive into an Armada 7000 Removable Drive MultiBay Adapter with two release latches***

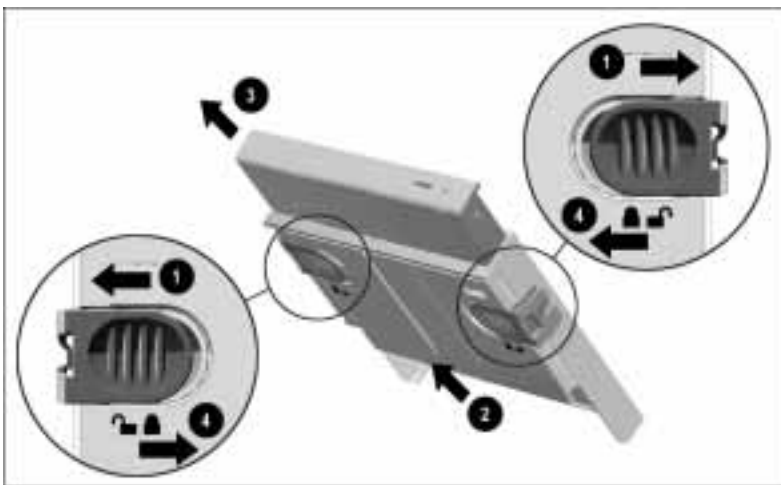
1. Slide the two release latches on the bottom of the adapter away from the center of the adapter until they click into the unlocked position ❶.
2. Hold the drive with the connector on the right side facing the front of the adapter.
3. Slide the drive into the adapter until the front of the drive ❷ is flush with the front of the adapter.
4. Slide the two release latches toward the center of the adapter until they click into the locked position ❸.



*Inserting a Drive into an Armada 7000 Removable Drive MultiBay Adapter with Two Release Latches*

***To remove a drive from an Armada 7000 Removable Drive MultiBay Adapter with two release latches***

1. Slide the two release latches on the bottom of the adapter away from the center of the adapter until they click into the unlocked position ❶.
2. Push forward on the back of the drive ❷ (without touching the connector) until you can grasp the front of the drive.
3. Slide the drive out of the adapter ❸.
4. Slide the two release latches toward the center of the adapter until they click into the locked position ❹.

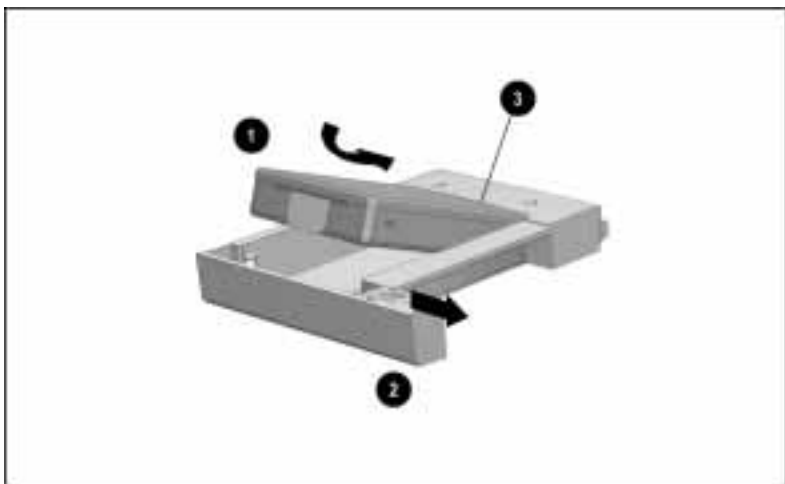


*Removing a Drive from an Armada 7000 Removable Drive MultiBay Adapter with Two Release Latches*

## **LTE 5000 MultiBay Hard Drive Carrier**

### ***To insert a drive into an LTE 5000 MultiBay Hard Drive Carrier***

1. If the drive ❶ is in a packing or storage tray, remove it from the tray and from any other packing materials.
2. Make sure the latch ❷ inside the carrier is pushed to the right.
3. Place the hard drive into the carrier with the contacts ❸ facing the back of the carrier.
4. Slide the drive to the back of the carrier until it is seated.
5. Push the latch inside the carrier to the left to secure the hard drive in the carrier.



*Inserting a Drive into an LTE 5000 MultiBay Hard Drive Carrier*

### ***To remove a drive from an LTE 5000 MultiBay Hard Drive Carrier***

1. Push the latch inside the carrier to the right to release the drive from the carrier.
2. Pull the drive toward the front of the carrier as you lift it out of the carrier.

# Inserting a Drive or Drive Assembly into a MultiBay

To insert a drive or drive assembly (a drive inserted into a drive adapter) into a desktop expansion base MultiBay, follow these steps:

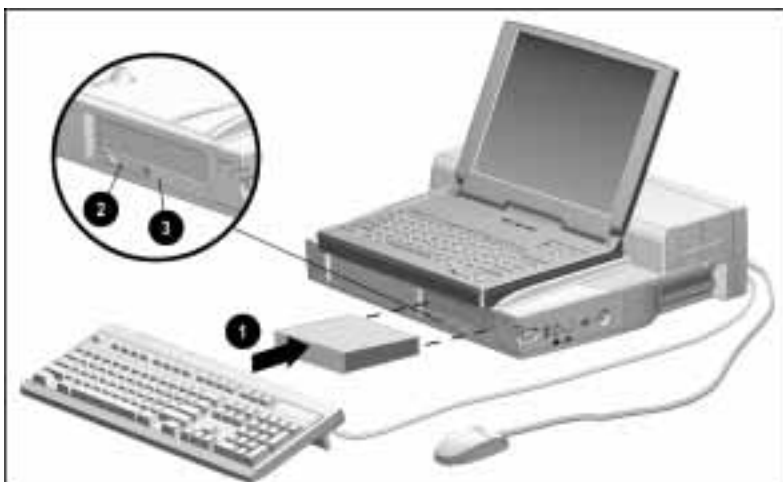
1. Unlock the expansion base keylock.
2. If you are inserting a diskette drive or a CD-ROM drive, ensure that no diskettes or CDs are in the drive and that the CD-ROM drive tray is closed.
3. If you are inserting a drive inserted into an Armada 7000 Removable Drive MultiBay Adapter, make sure the latch or latches are in the locked (closed) position.



**CAUTION:** Inserting a drive assembly with a latch in the unlocked (open) position into a MultiBay can damage the adapter and make it difficult to remove from the MultiBay.

---

4. If the computer is docked, turn off the computer.
5. Slide the drive or drive assembly into the MultiBay ❶. When the drive or drive assembly is seated, the MultiBay device release latch ❷ slides to the right.



*Inserting a Drive Assembly into a Desktop Expansion Base MultiBay*

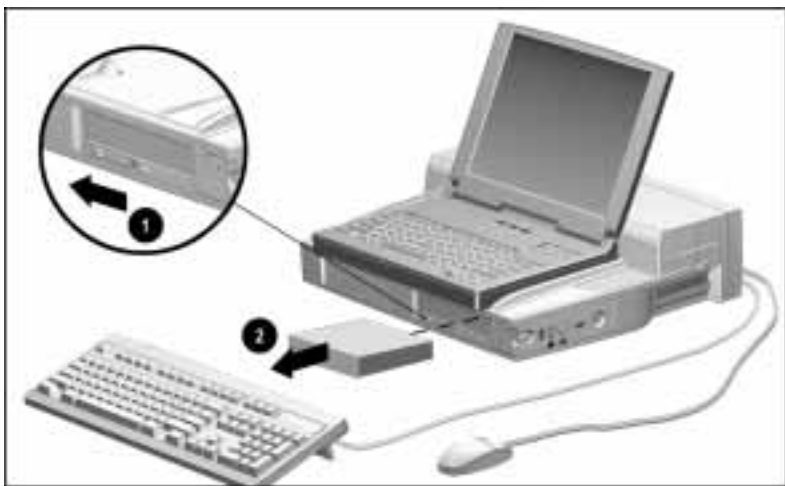
**NOTE:** The MultiBay light ❸ is on while a drive in a MultiBay is being accessed.



## Removing a Drive or Drive Assembly from a MultiBay

To remove a drive or drive assembly (a drive inserted into a drive adapter) from a desktop expansion base MultiBay, follow these steps:

1. Save and close all files and applications on the drive you are removing.
2. Unlock the expansion base keylock.
3. If you are removing a diskette drive or a CD-ROM drive, ensure that no diskettes or CDs are in the drive and that the CD-ROM drive tray is closed.
4. If the computer is docked, turn off the computer.
5. Slide the MultiBay release latch **❶** to the left to release the drive or drive assembly from the MultiBay.
6. Slide the drive or drive assembly out of the MultiBay **❷**.



*Removing a Drive Assembly from a Desktop Expansion Base MultiBay*

## INSERTING AND REMOVING PC CARDS

### Adding a PC Card to the System

The desktop expansion base supports any PC Card that is supported by the computer. Refer to your computer documentation for information about

- Selecting a PC Card that is compatible with your system.
- Installing card and socket services or enablers.
- Configuring a PC Card.
- Responding to prompts or beeps that may occur as you install or remove a PC Card.
- Turning off the system before adding or removing a PC Card.
- Restarting the computer after a PC Card has been added or removed.



**CAUTION:** If you install card and socket services or enablers provided by a PC Card manufacturer, you may not be able to use other PC Cards.

---

## Selecting a PC Card Slot

PC Cards are classified as Type I, Type II, and Type III. The three types are about the same length and width, but vary in thickness. Type III cards are the thickest, at less than one-half inch (10.5 mm).

The desktop expansion base has two PC Card slots. These slots are *not* identical.

- Type I and Type II PC Cards are supported in the top and bottom PC Card slots singly or in any combination.
- A Compaq telephony card is supported only in the *top* slot.
- A Type III or Zoomed Video PC Card is supported only in the *bottom* PC Card slot. No other PC Card can be used in the top slot when a Type III PC Card occupies the bottom slot.

## Inserting a PC Card

To insert a PC Card into the expansion base, follow these steps:

1. Unlock the expansion base keylock.
2. Turn off the system.

**NOTE:** For information about removing a PC Card without turning off the system, refer to your computer and PC Card documentation.

3. Open the PC Card door ❶ on the expansion base by swinging it upward ❷ from the bottom.



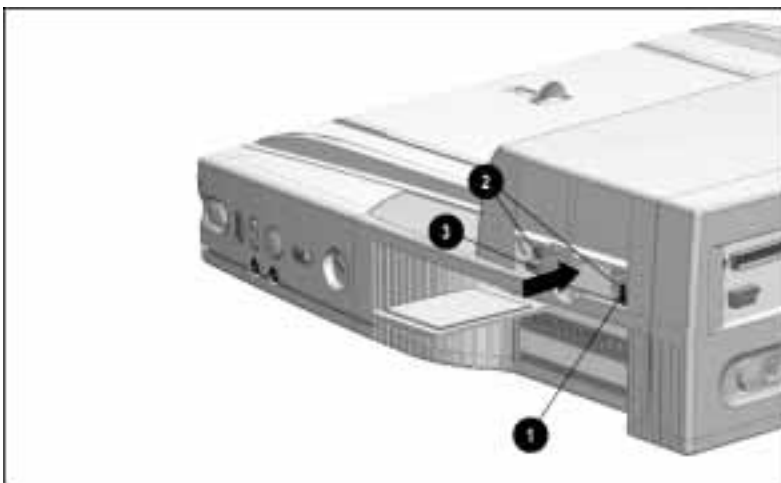
*Opening the PC Card Door*

4. If the PC Card security post ❶ is blocking access to the PC Card slot, slide it to the right.
5. Align the PC Card with the horizontal alignment rails ❷ on both sides of the PC Card slot. The 68-pin connector on the PC Card should be facing the expansion base.
6. Gently push the PC Card into the slot until the PC Card eject button ❸ is flush with the face of the card.



**CAUTION:** Forcing a PC Card into a slot can damage the connectors.

---



*Inserting a PC Card into the Desktop Expansion Base*

7. If the PC Card does not have an extension or require cabling, push down on the base of the PC Card door to close it.
8. If the PC Card requires cabling, refer to the PC Card documentation for connection information.
9. Restart the system, if appropriate.

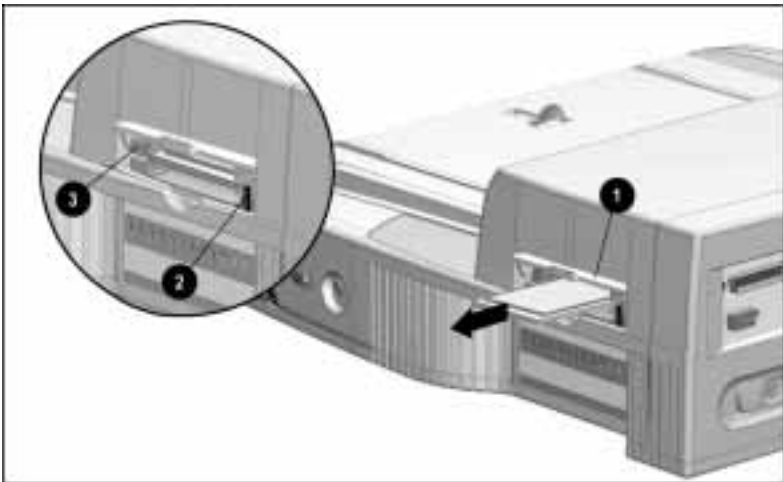
## Removing a PC Card

To remove a PC Card from the desktop expansion base, follow these steps:

1. Unlock the expansion base keylock.
2. Turn off the system.

**NOTE:** For information about removing a PC Card without turning off the system, refer to your computer and PC Card documentation.

3. If the PC Card door ❶ is closed, open it by swinging it upward from the bottom.
4. Slide the PC Card security post ❷ to the right.
5. Press the PC Card eject button ❸.
6. Pull the PC Card out of the PC Card slot.
7. Push down on the base of the PC Card door to close it.
8. Restart the system, if appropriate.



*Removing a PC Card from the Desktop Expansion Base*

# *chapter* 9

## INSTALLING AND REMOVING AN EXPANSION BOARD

### Installing an Expansion Board



**CAUTION:** If you are using the desktop expansion base with a computer in the Armada 7800 Family of Personal Computers, installing an optional video card in the expansion base can disable the Advanced Graphics Port functionality of the system.

---

Use the following procedure to install a 32-bit PCI expansion board or a 16-bit or 8-bit full-length ISA expansion board.

- Any expansion board can be placed in any available expansion board slot.
- Any two expansion boards can be installed at the same time.

If you are installing an expansion board, such as a SCSI controller, that requires a cable connection to a half-height bay, refer to the expansion board documentation for connection information.

**NOTE:** A SCSI device can be used externally by connecting it to the external connector on the SCSI controller. For information, refer to “Accessing Expansion Board Connectors” in this chapter.

## Before You Begin

Before you begin, undock the computer and disconnect external equipment by following these steps:

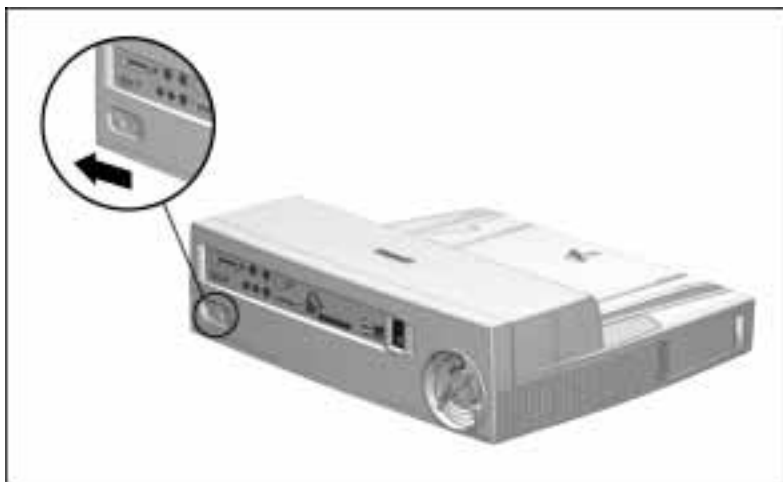
1. Remove the external monitor and monitor support cover, if applicable.
2. Save all files and applications, then turn off the computer.
3. Unlock the desktop expansion base keylock.
4. Undock the computer.
5. Turn off all external devices connected to the expansion base.
6. Disconnect all external cables and the power cord from the expansion base.

**NOTE:** Use a Torx T-15 screwdriver.

## Removing the Rear Panel

To remove the rear panel, follow these steps:

1. Position the expansion base with the rear panel facing you.
2. Move the rear panel release latch left to the open position.



*Releasing the Rear Panel with the Rear Panel Release Latch*

3. Using both hands, grasp the bottom sides of the rear panel and swing the bottom out and up until it disengages.



*Removing the Rear Panel*

4. When you feel the rear panel detach from the top cover of the expansion base, lift it up and away from the expansion base.



## Removing the Expansion Slot Cover



**WARNING:** To reduce the risk of personal injury from hot surfaces, allow the internal system components to cool before touching them.

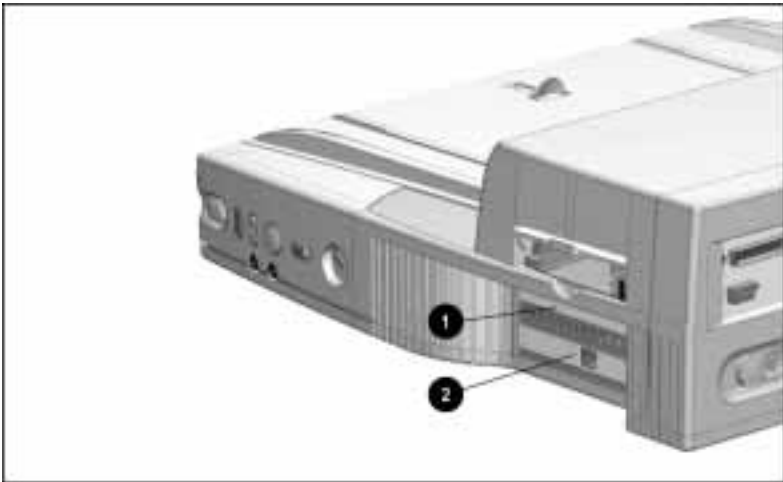


**CAUTION:** Electrostatic discharge (ESD) can damage electronic components. Before beginning this procedure, ensure that you are properly grounded. Refer to Appendix C, “Electrostatic Discharge.”

---

To remove the expansion slot cover, follow these steps:

1. Find the two expansion slot covers **❶** and **❷** on the right side of the expansion base. You can install a PCI expansion board or an ISA expansion board in either the top or the bottom slot. Select the slot you want to use.



*Identifying the Expansion Slot Covers*

2. Remove the screw that secures the expansion slot cover to the expansion slot chassis. This screw will be used later to secure the newly installed expansion board.
3. Remove the expansion slot cover.

**NOTE:** Retain the expansion slot cover. You will need it if you ever remove the expansion board from the expansion base.

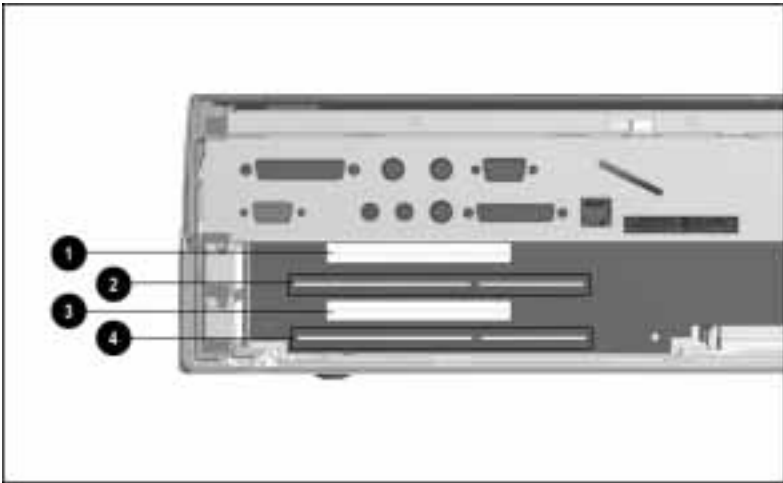


*Removing an Expansion Slot Cover*

## Inserting the Expansion Board

To insert the expansion board onto the input/output (I/O) assembly, follow these steps:

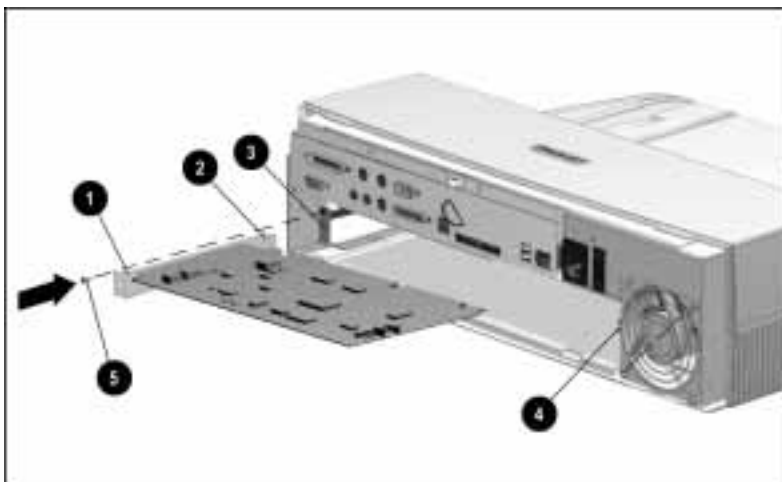
1. There are four expansion board connectors.
  - If you have removed the top slot cover, you can insert the expansion board into one of the two top expansion board slot connectors ❶ and ❷.
  - If you have removed the bottom slot cover, you can insert the expansion board into one of the two bottom expansion board slot connectors ❸ and ❹.
  - Select the connector within a slot that matches the connectors on the expansion board. For example, insert a PCI expansion board into slot connector ❶ or ❸; insert an ISA expansion board into slot connector ❷ or ❹.



*Identifying the Expansion Board Connectors*

**NOTE:** The top expansion board slot comprises two connectors, ❶ and ❷. The bottom slot comprises connectors ❸ and ❹. Only one expansion board can be installed per slot. If you are installing an expansion board in the top slot, use connector ❶ *or* ❷. If you are installing an expansion board in the bottom slot, use connector ❸ *or* ❹.

2. Align the bracket **1** on the left side of the expansion board with the tabs **2** on the slot cover. If you are installing a full-length expansion board, align the edge of the board opposite the slot cover chassis **3** with the appropriate alignment rail **4**.



*Aligning an Expansion Board Bracket with the Tabs on an Expansion Slot Cover Chassis*

3. Push the expansion board straight into the expansion board slot until it is seated.
4. Fasten the expansion board bracket to the expansion board chassis with the screw **5** that you removed from the expansion board slot cover.

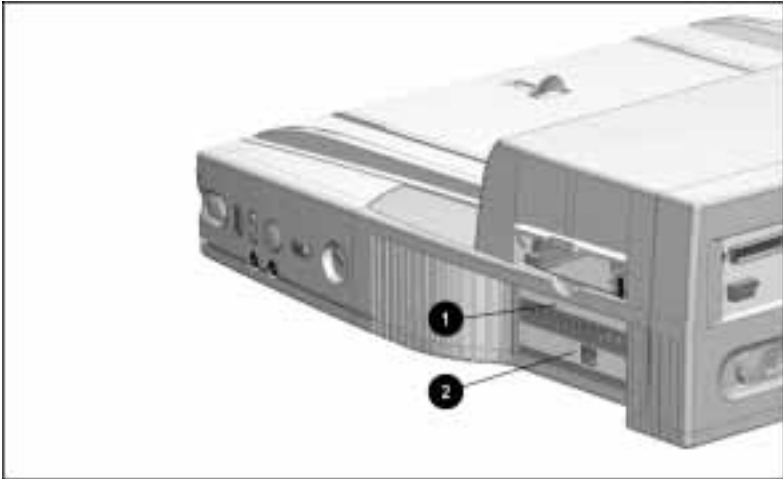
## Replacing the Rear Panel

To replace the rear panel, follow these steps:

1. Replace the rear panel by inserting the tabs on the top of the rear panel into the slots in the top cover. When the tabs are in the slots, pivot the bottom of the rear panel downward until it is seated.
2. Secure the rear panel by moving the rear panel release latch right to the closed position.
3. Reconnect the power cord and all external equipment cables to the expansion base.

## Accessing Expansion Board Connectors

Once an expansion board is installed in the top ❶ or bottom ❷ slot, you can access its connectors from the right side of the expansion base.



*Accessing an Expansion Board Connector*

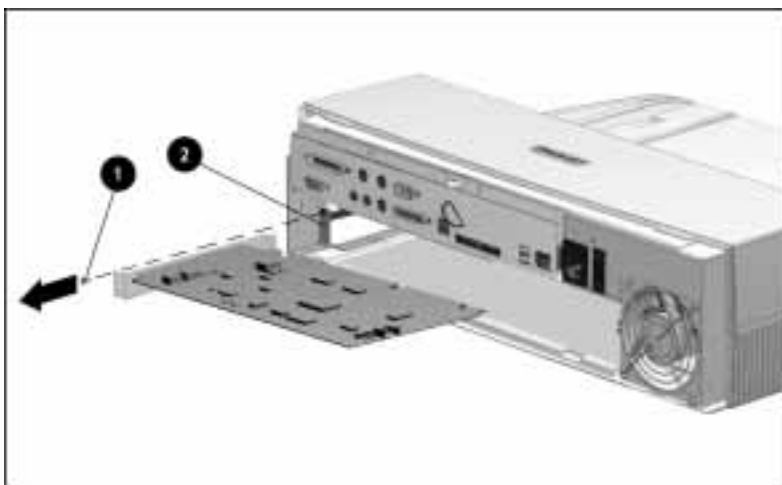
If the expansion board that has been installed has a cable, refer to the documentation included with the expansion board for connection information.

# Removing an Expansion Board

Use the following procedure to remove a 32-bit PCI expansion board or a 16-bit or 8-bit full-length ISA expansion board.

**NOTE:** Use a Torx T-15 screwdriver.

1. Disconnect any exterior cables connected to the expansion board that you plan to remove.
2. Follow the procedures under “Before You Begin” and “Removing the Rear Panel” in “Installing an Expansion Board” in this chapter.
3. Remove the screw ❶ that is securing the expansion board to the chassis ❷. This screw will be used later:
  - If you replace the expansion board that you are removing, you will use the screw to secure the new expansion board.
  - If you do not replace the expansion board that you are removing, you will use the screw to secure an expansion slot cover.



*Removing an Expansion Board*

4. Pull the expansion board straight out.

5. If you are not installing another expansion board in the same expansion slot, replace the expansion board slot cover. (This is the slot cover that was removed when the expansion board was installed.) Attach it to the expansion slot cover chassis with the screw that you removed in step 3.

If you are inserting a different expansion board into the same expansion slot, refer to “Installing an Expansion Board” earlier in this chapter and follow the instructions in these sections:

- First, “Inserting the Expansion Board onto the I/O Assembly”
- Second, “Replacing the Rear Panel”
- Third, “Accessing Expansion Board Connectors”



*Replacing an Expansion Slot Cover*

6. Replace the rear panel by inserting the tabs on the top of the rear panel into the slots in the top cover. When the tabs are in the slots, pivot the bottom of the rear panel downward until it is seated.
7. Secure the rear panel by moving the rear panel release latch right to the closed position.
8. Reconnect the power cord and all external equipment cables to the expansion base.

# chapter 10

## INSTALLING AND REMOVING A HALF-HEIGHT BAY DEVICE

### Installing a Half-Height Bay Device

This procedure explains how to install a standard half-height drive in a half-height bay. A half-height drive power cable is preinstalled inside the desktop expansion base.

The procedures for installing an Armada 7000 Half-Height MultiBay Adapter or an LTE 5000 Half-Height MultiBay Adapter are similar. Refer to the adapter documentation for specific instructions.

**NOTE:** Use slotted Torx T-10 and T-15 screwdrivers.



## Caring for Half-Height Drives

Half-height drives are fragile components that must be handled with care.

---



**CAUTION:** To prevent damage to the computer, damage to a removable drive, or loss of information, observe these precautions:

- Before removing or inserting a hard drive, shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, then shut it down.
  - Before removing a diskette drive, ensure that a diskette is *not* in the drive.
  - Before removing a CD-ROM drive, ensure that a compact disc is *not* in the drive and that the CD-ROM tray is closed.
  - Before handling a drive, ensure that you are discharged of static electricity. While handling a drive, avoid touching the connector. For more information about preventing electrostatic damage, refer to Appendix C.
  - Handle a drive carefully; do not drop it.
  - Avoid exposing a hard drive to products that have magnetic fields such as monitors or speakers.
  - Avoid exposing a drive to temperature extremes.
  - Avoid exposing a drive to liquids. Do not spray it with cleaners.
  - Do not use excessive force when inserting a drive into a drive bay.
  - If a drive must be mailed, do the following. Place the drive into a into a bubble pack mailer or other suitable form of protective packaging. Label the package "Fragile: Handle With Care."
-

## Before You Begin

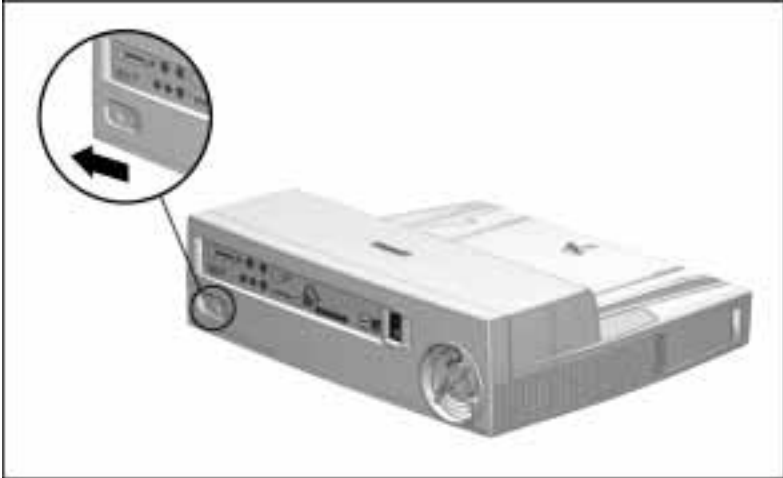
Before you begin, undock the computer and disconnect external equipment by following these steps:

1. Save all files and applications, then turn off the computer.
2. Remove the external monitor and monitor support cover, if in place.
3. Unlock the desktop expansion base keylock.
4. Undock the computer.
5. Turn off all external devices connected to the expansion base.
6. Disconnect all external cables and the power cord from the expansion base.

## Removing the Rear Panel

To remove the rear panel, follow these steps:

1. Position the expansion base with the rear panel facing you.
2. Slide the rear panel release latch left to the open position.



*Sliding the Rear Panel Release Latch to Release the Rear Panel*

3. Using both hands, grasp the bottom sides of the rear panel and swing the bottom out and up until it disengages.



*Removing the Rear Panel*

4. When you feel the rear panel detach from the top cover of the expansion base, lift it up and away from the expansion base.

## Removing the Top Cover



**WARNING:** To reduce the risk of personal injury from hot surfaces, allow the internal system components to cool before touching them.

---

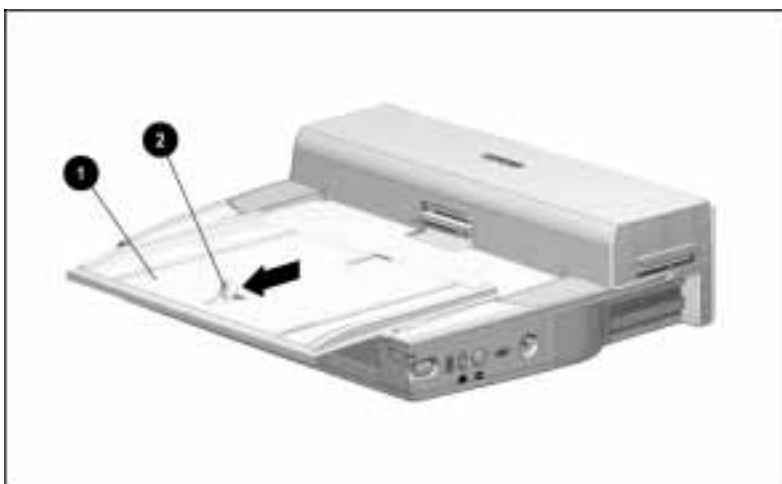


**CAUTION:** Electrostatic discharge (ESD) can damage electronic components. Before beginning this procedure, ensure that you are properly grounded. For more information, refer to Appendix C, “Electrostatic Discharge.”

---

To remove the top cover, follow these steps:

1. Reposition the expansion base so that the front of the expansion base is facing you.
2. Remove the alignment tray ❶ from the expansion base by pulling the docking latch ❷ forward.



*Removing the Alignment Tray from the Desktop Expansion Base*

3. Remove and retain the three screws from the top cover.



*Removing the Screws from the Top Cover*

4. Using both hands, grasp the top outside edges of the top cover.
5. Lift the back edge of the top cover and swing it forward. The top cover pivots off the expansion base along the front edge.

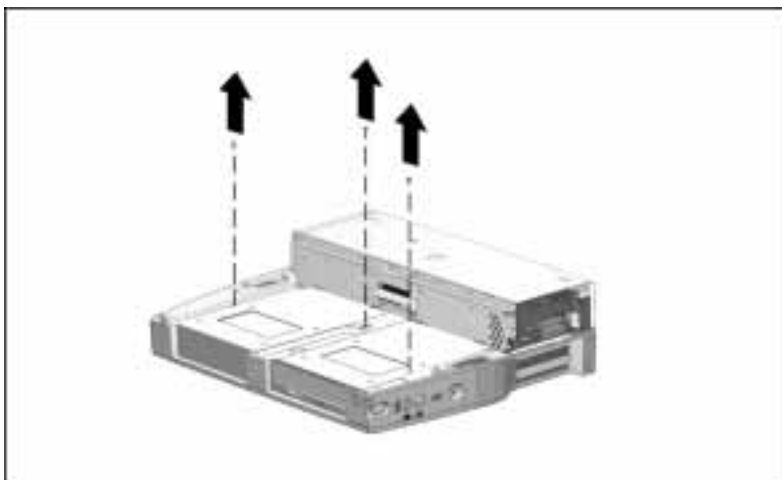


*Removing the Top Cover*

## Removing the Drive Cage

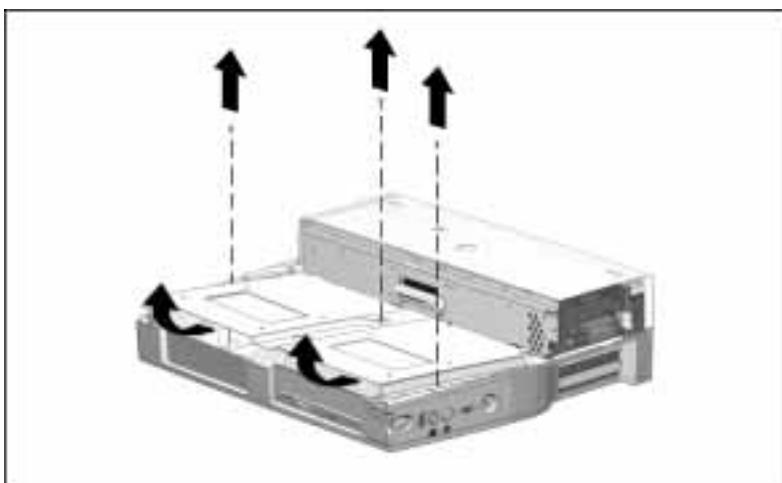
To remove the drive cage, follow these steps:

1. Remove and retain the three screws securing the metal drive cage shield to the expansion base. The screws are two sizes.



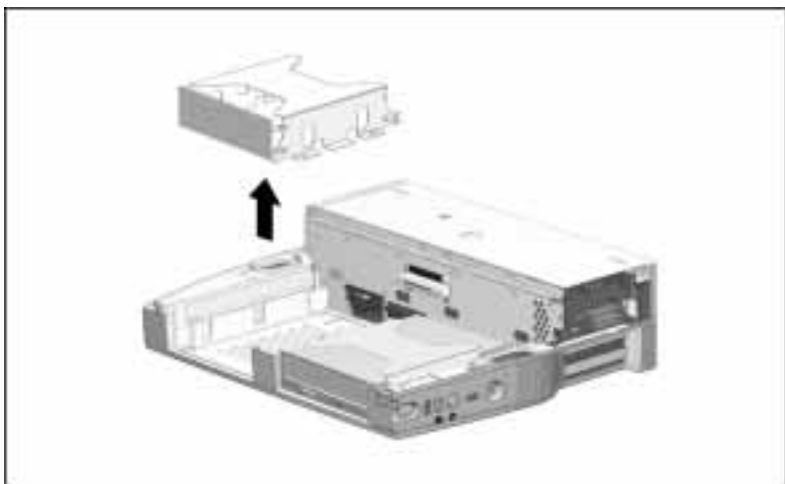
*Removing the Screws from the Drive Cage Shield*

2. Lift the front edge of the metal drive cage shield and swing it approximately 45 degrees upward. Then pull it toward you. The shield pivots along the four tabs extending into the metal plate at the rear of the drive cage shield.



*Removing the Drive Cage Shield from the Desktop Expansion Base*

3. Lift the drive cage out of the expansion base.



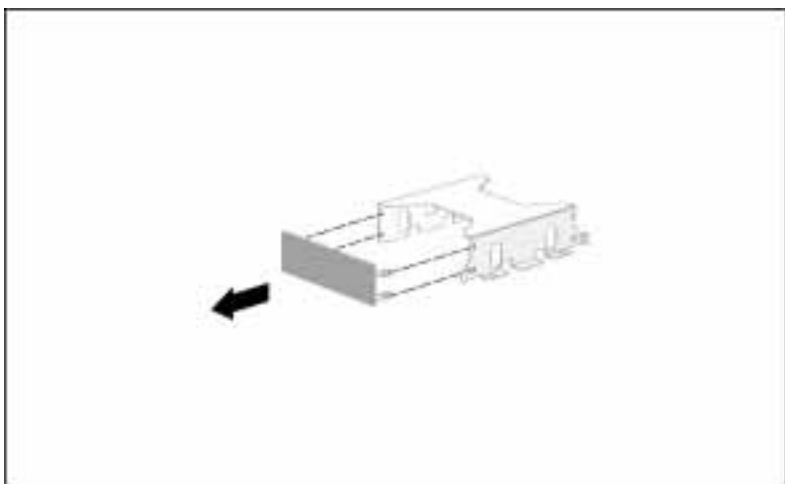
*Removing the Drive Cage from the Desktop Expansion Base*

## Inserting the Half-Height Drive into the Drive Cage

To insert the drive into the drive cage, follow these steps:

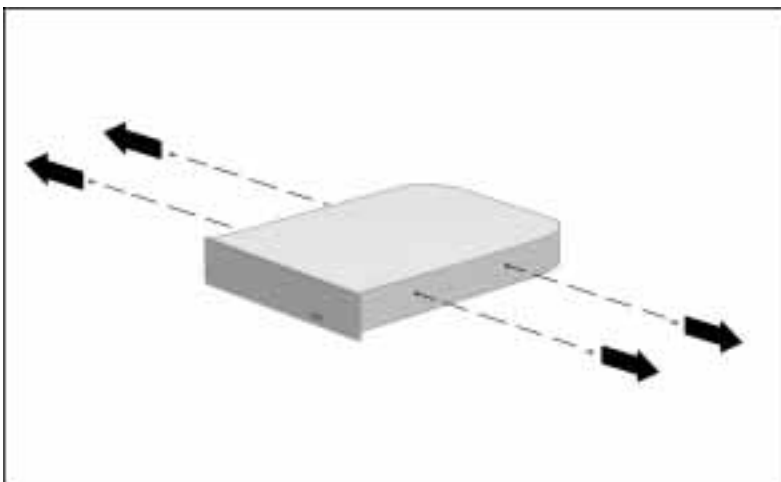
1. Remove the half-height bay blank bezel by pressing lightly in its center as you pull its edges away from the drive cage.

**NOTE:** Retain this bezel. You will need it if you ever remove and do not replace the half-height drive that you are installing.



*Removing the Half-Height Bay Blank Bezel from the Drive Cage*

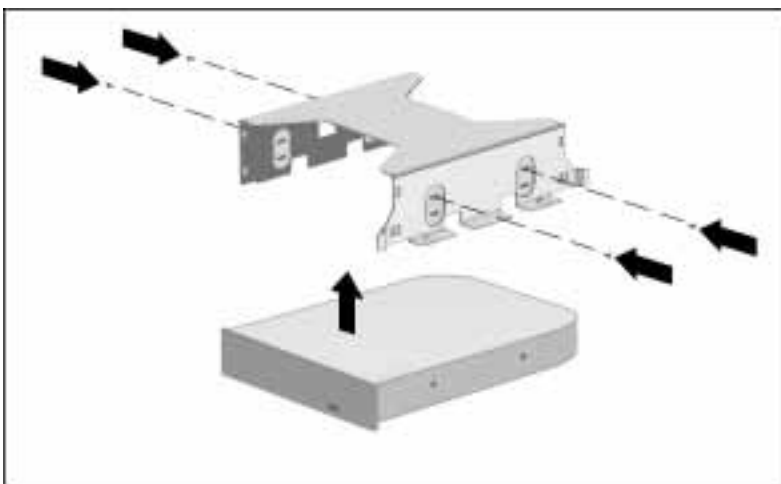
2. Remove the four screws from the drive.



*Removing the Screws from the Half-Height Drive*

3. Place the drive cage over the half-height drive.
4. Attach the drive cage to the half-height drive by loosely replacing the four screws that you removed from the half-height drive. Insert the screws through the drive cage and into the half-height drive.

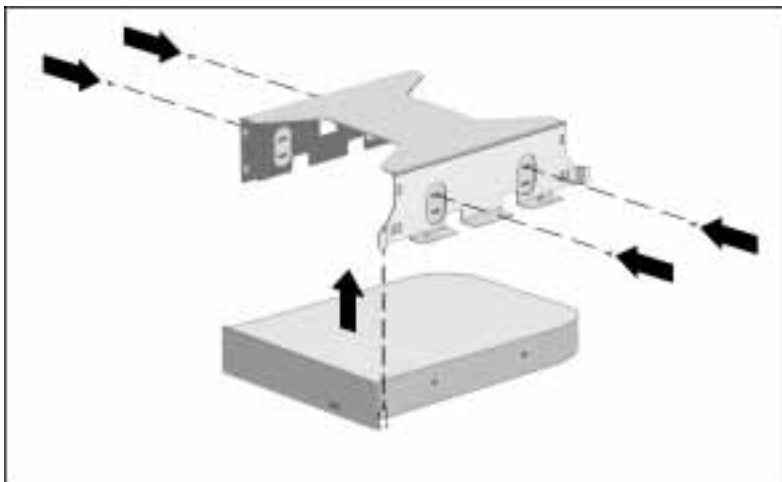
**NOTE:** Two sets of screw holes are provided on each side of the drive cage. Select the pairs of holes that match the holes in the sides of the half-height drive.



*Attaching the Drive Cage to the Half-Height Drive*



5. Align the front cover of the half-height drive with the front edge of the tab on the inside edge of the drive cage.



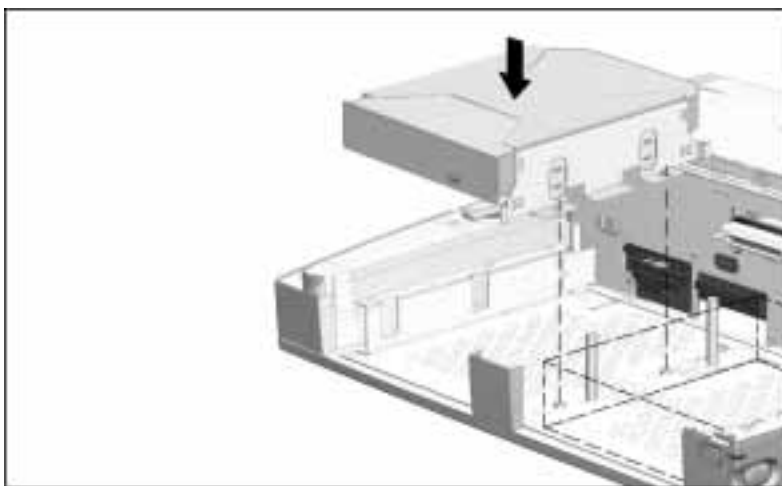
*Aligning the Half-Height Drive with the Drive Cage*

6. Tighten the four screws that secure the drive cage to the half-height drive.

## Inserting the Drive Cage Assembly into the Desktop Expansion Base

To insert the drive cage assembly (the drive cage attached to the half-height drive) into the expansion base, follow these steps:

1. Attach the cables on the back of the half-height drive to the connectors on the expansion base. For connection information, refer to the half-height drive documentation.
2. Align the holes in the front and rear base tabs of the drive cage with the pins on the bottom of the expansion base.
3. Place the aligned drive cage assembly on the bottom of the expansion base.



*Placing the Drive Cage Assembly onto the Bottom of the Desktop Expansion Base*

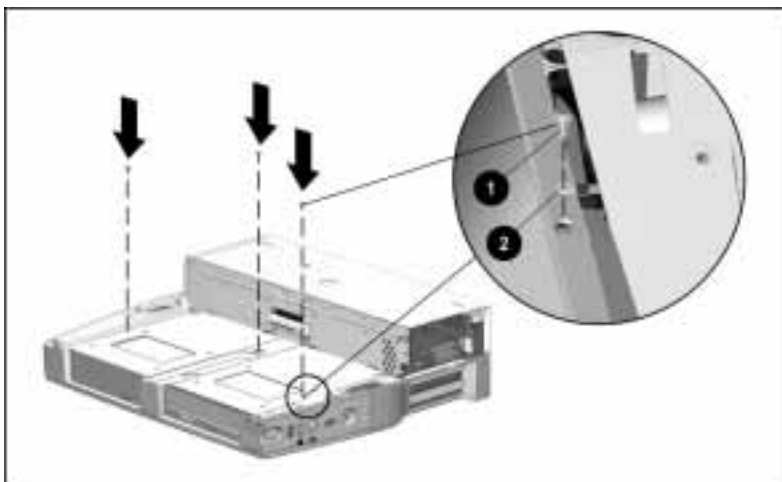
4. Connect the half-height drive power cable included with the expansion base and any other cables required by the drive as directed in the documentation that came with the drive.
5. Tuck the cables attaching the drive cage assembly to the expansion base beneath the slots that will be used to reconnect the metal drive cage shield to the metal plate



*Tucking Cables Beneath the Drive Cage Shield Slots*

6. Replace the drive cage shield by inserting the four tabs along the back of the drive cage shield into the four slots on the metal plate. (Be sure no cables are caught between the drive cage shield and the metal plate.)

7. Replace the three screws that secure the drive cage. The two matching screws go into the outside rails. Ensure that the right screw ❶ secures the grounding strap grommet ❷ to the drive cage shield.



*Replacing the Screws in the Drive Cage Shield*

## Replacing the Top Cover

To replace the top cover, follow these steps:

1. Replace the desktop expansion base top cover by aligning its two front corners with the two front corners of the expansion base. Then push down in the center of the top cover assembly until it is seated.
2. Replace the three screws that secure the top cover to the expansion base.



*Replacing the Screws on the Top Cover*

3. Replace the alignment tray of the expansion base by sliding it straight back until it clicks into place.

## Replacing the Rear Panel

To replace the rear panel, follow these steps:

1. Reposition the expansion base so that its rear panel is facing you.
2. Replace the rear panel by inserting the tabs on the top of the rear panel into the slots in the top cover. When the tabs are in the slots, pivot the bottom of the rear panel downward until it is seated.
3. Secure the rear panel by moving the rear panel release latch right to the closed position.
4. Reconnect the power cord and all external equipment cables to the expansion base.

# Removing a Half-Height Bay Device

This procedure explains how to remove a standard half-height drive from the half-height bay. The procedures for removing an Armada 7000 Half-Height MultiBay Adapter or an LTE 5000 Half-Height MultiBay Adapter are similar. Refer to the adapter documentation for specific instructions.

**NOTE:** Use slotted Torx T-10 and T-15 screwdrivers.

## Accessing the Half-Height Bay Device

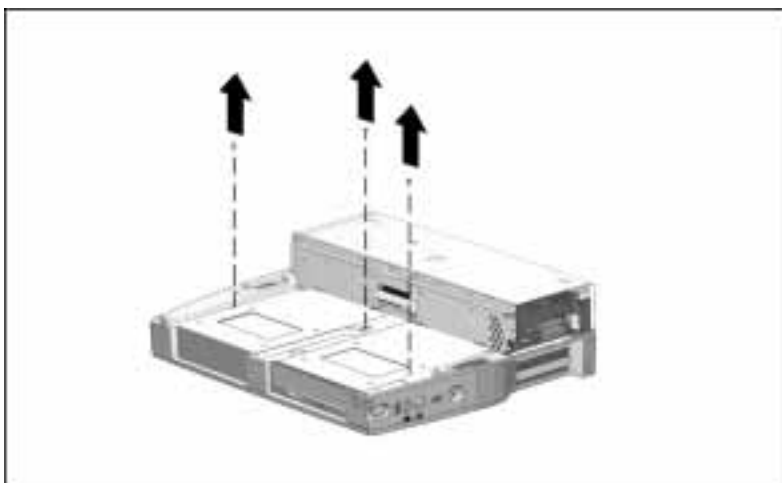
To access the half-height bay device, refer to “Installing a Half-Height Bay Device” earlier in this chapter and follow the instructions in these sections:

- First, “Before You Begin.”
- Second, “Removing the Rear Panel.”
- Third, “Removing the Top Cover.”

## Removing the Drive Cage Assembly

To remove the drive cage and half-height drive, follow these steps:

1. After you have removed the top cover, remove the three screws securing the metal drive cage shield to the expansion base.



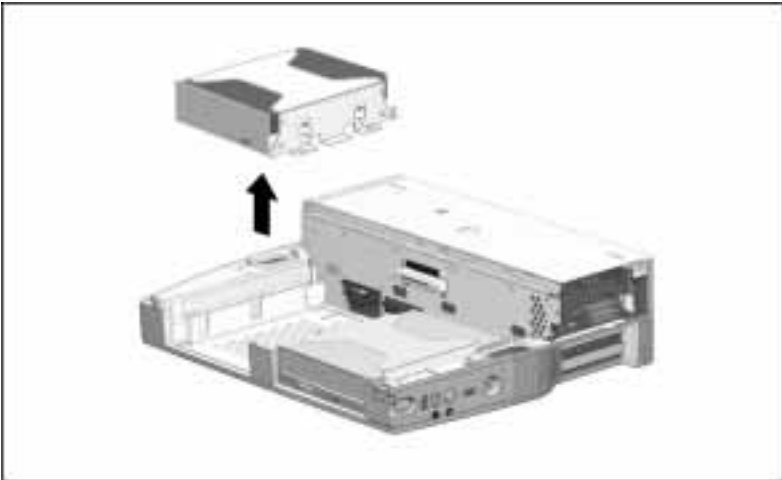
*Removing the Screws from the Drive Cage Shield*

2. Lift the front edge of the metal drive cage shield and swing it approximately 45 degrees upward. Then pull it toward you. The shield pivots along the four tabs extending into the metal plate at the rear of the drive cage shield.



*Removing the Drive Cage Shield from the Desktop Expansion Base*

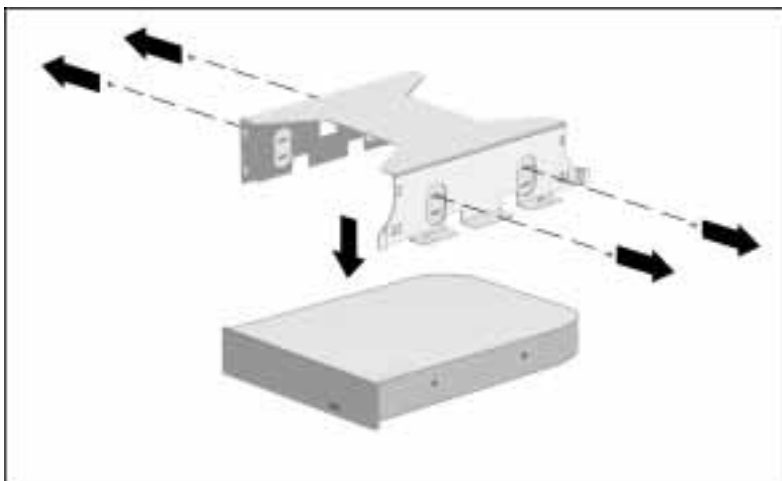
3. After removing the drive cage shield, disconnect the cable(s) connecting the half-height drive to the expansion base.
4. Lift the drive cage and attached half-height drive out of the expansion base.



*Removing the Drive Cage Assembly from the Desktop Expansion Base*

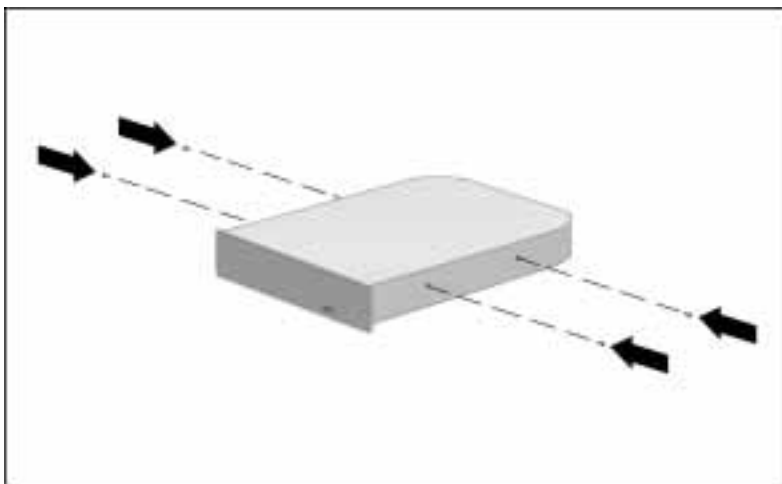
## Removing the Half-Height Drive from the Drive Cage Assembly

1. Remove the four screws attaching the drive cage to the half-height drive (two screws on each side).



*Removing the Screws Attaching the Drive Cage to the Half-Height Drive*

2. Remove the half-height drive from the drive cage.
3. Replace the four screws into the sides of the drive. Use any of the screw holes.

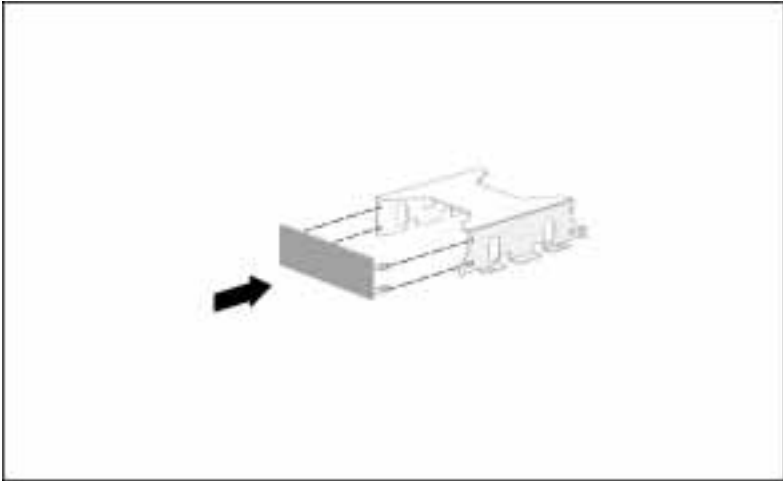


*Replacing the Screws in the Half-Height Drive*



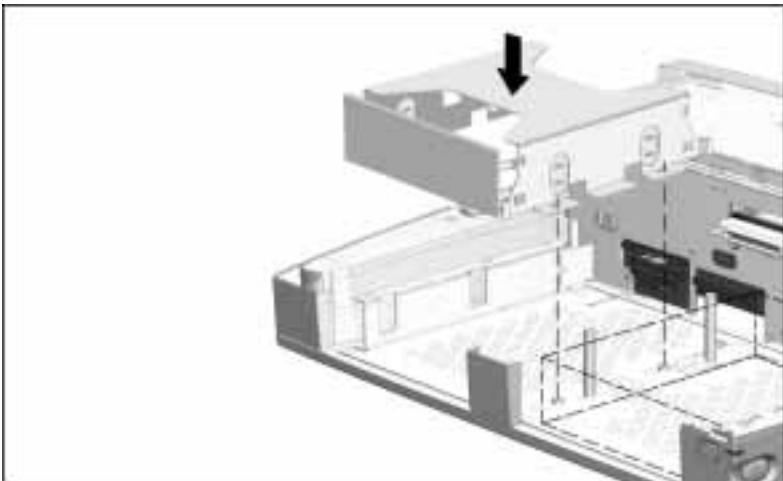
## Replacing the Drive Cage in the Desktop Expansion Base

1. Replace the half-height bay blank bezel by inserting the two tabs on each side of the bezel into the two slots on each side of the drive cage. (This bezel was removed when the half-height drive was installed.)



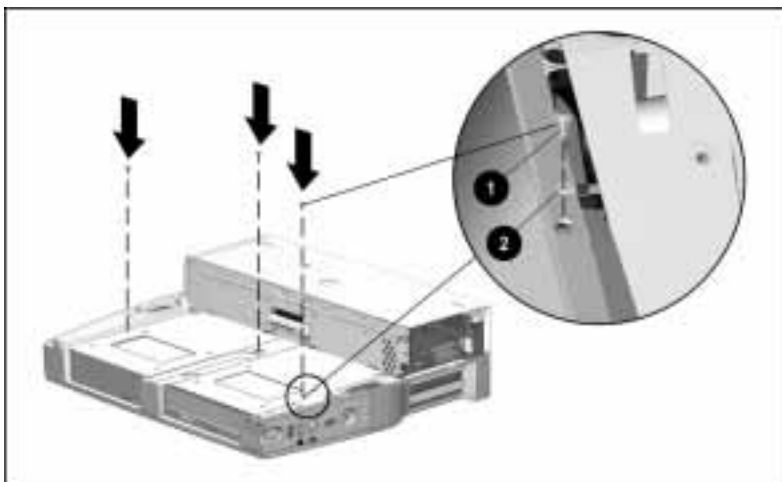
*Attaching the Half-Height Bay Blank Bezel to the Drive Cage*

2. Align the holes in the front and rear base tabs of the drive cage with the pins on the bottom of the expansion base.
3. Place the aligned drive cage on the floor of the expansion base.



*Placing the Drive Cage onto the Bottom of the Desktop Expansion Base*

4. Replace the drive cage shield by inserting the four tabs along the back of the drive cage shield into the four slots on the metal plate.
5. Replace the three screws that secure the drive cage shield to the expansion base. The two matching screws go into the outside rails. Ensure that the right screw **①** secures the grounding strap grommet **②** to the drive cage shield.

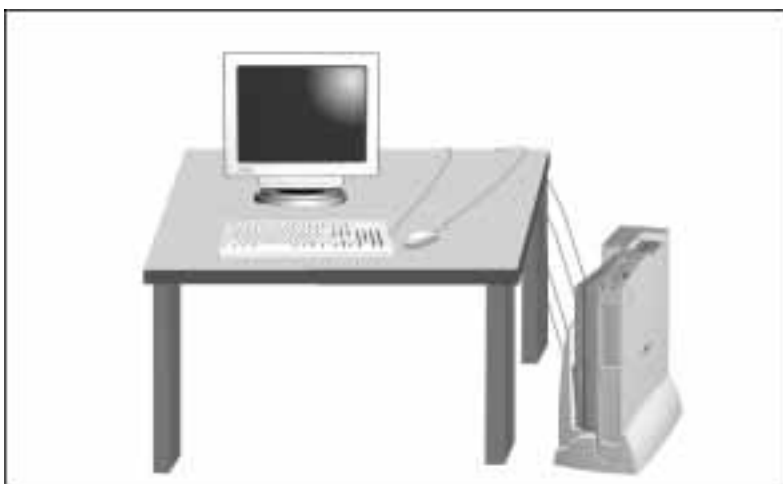


*Replacing the Screws in the Drive Cage Shield*

6. To complete the reassembly of the expansion base, refer to “Installing a Half-Height Bay Device” in this chapter and follow the instructions in these sections:
  - First, “Replacing the Top Cover.”
  - Second, “Replacing the Rear Panel.”

# chapter 11

## SETTING UP A TOWER SYSTEM



*Tower System*

For information about purchasing a tower stand, refer to “Worldwide Telephone Numbers” in Appendix A for your nearest Compaq authorized dealer, reseller, or service provider.

# Preparing to Convert a Desktop System to a Tower System

To prepare a desktop system for conversion to a tower system, follow these steps:

1. Save all files and applications, then turn off the system.
2. Remove the external monitor and monitor support cover, if applicable.
3. Undock the computer.
4. Turn off all external devices connected to the desktop expansion base.
5. Disconnect all cables and the power cord from the expansion base.

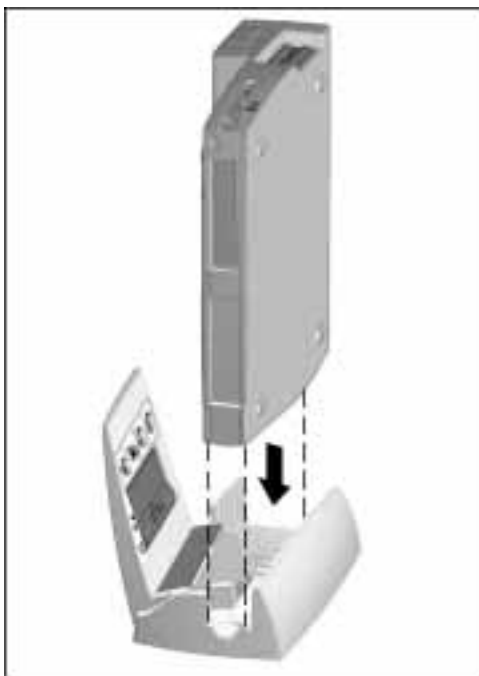
# Inserting the Desktop Expansion Base into an Optional Tower Stand

1. Place the tower stand in a convenient location.
2. Set the expansion base into the tower stand left side down.
3. If you are converting from a desktop system, reconnect all cables, cords, and external devices to the expansion base.

If you are setting up the system (the expansion base, computer, and all connected external devices) for the first time, follow the procedures in Chapter 1 for

- First, “Connecting the Keyboard, Mouse, and Monitor.”
- Second, “Connecting the Expansion Base Power Cord.”

Then proceed to “Docking the Computer in a Tower System,” next in this chapter.



*Setting the Desktop Expansion Base into the Optional Tower Stand*

# Docking the Computer in a Tower System



**WARNING:** To avoid the risk of personal injury, keep fingers and hands away from the rear of the computer when docking.

---



**CAUTION:** Set up a new computer while it is undocked. Do not turn a computer on for the first time while it is docked.



---

To dock the computer in the desktop expansion base in an optional tower stand, follow these steps:



1. Turn off the computer, if it is on. If you are not sure whether the computer is off or in Hibernation, turn the computer on, then shut it down.

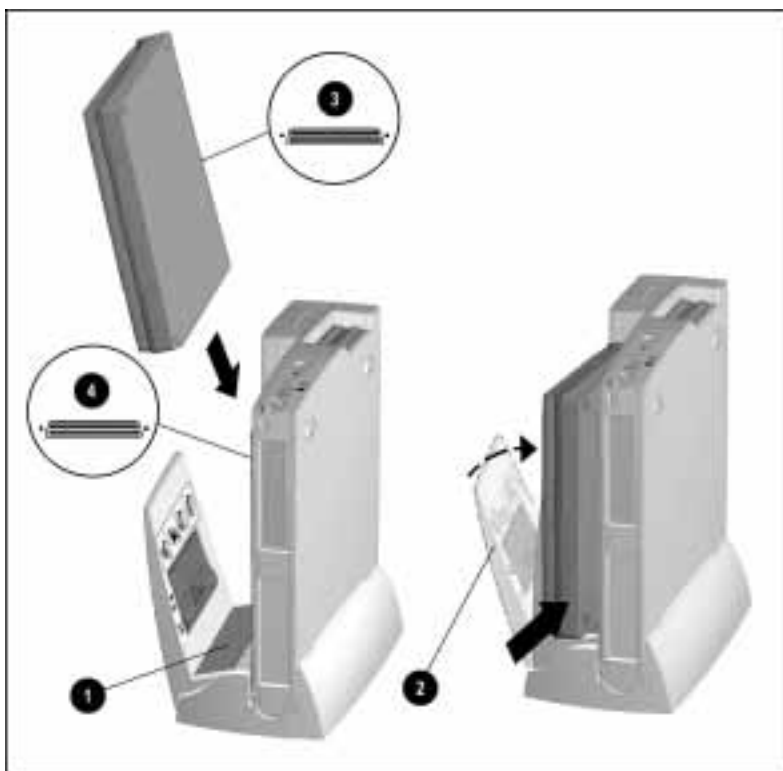
**NOTE:** For information about docking the computer without shutting it down, refer to “Preparing to Dock the Computer” in Chapter 4.

2. Turn off then disconnect any external equipment connected to the computer. Disconnect cables to any installed PC Cards. Disconnect the computer power cord.
3. Close the computer, if it is open.

4. Place the computer left side down on the docking rail  of the tower stand. If the preset width of the tower stand is the correct setting for your computer, the weight of the computer will close the hinged panel  flush against the top of the computer.

**NOTE:** If the hinged panel does not close flush against the top of the computer, refer to “Adjusting the Width of the Tower Stand,” next in this chapter.

5. Slide the computer toward the rear of the expansion base until the docking connector on the computer  comes into contact with the docking connector on the expansion base . This activates the motorized docking mechanism, which pulls the computer into a fully seated connection.




*Sliding the Computer into the Desktop Expansion Base*



## Adjusting the Width of an Optional Tower Stand

You can adjust the width of a tower stand to the thickness of your computer with preset or custom settings.

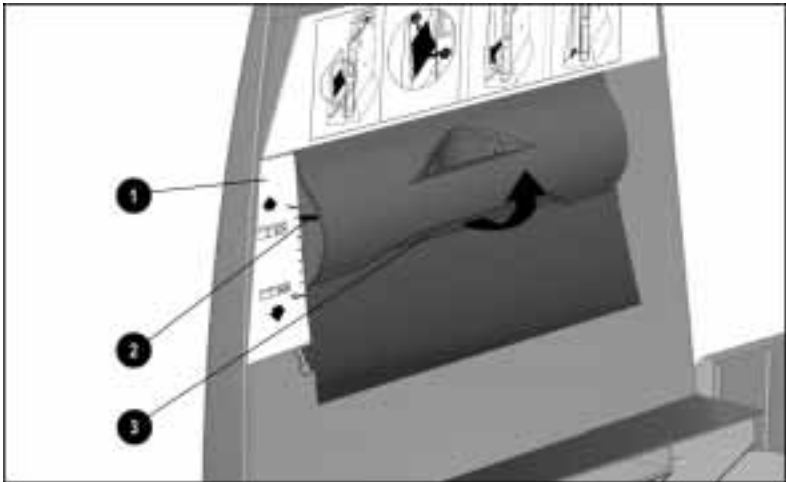
- Width settings are retained by the tower stand. You will not need to adjust these settings again unless you want to dock a different-sized computer.
- Width settings include the width of the expansion base.

### Adjusting a Tower Stand to a Preset Width

To adjust a tower stand to the preset width setting for a computer model listed on the width table , follow these steps:

1. Undock the computer.
2. Find the setting for your computer model on the width table.
3. Align the width selector  on the width adjuster  with the preset width setting for your computer by pulling the bottom of the width adjuster outward, then up or down.

**NOTE:** The width selector may not align precisely with the preset width setting.






*Aligning the Width Selector with the Preset Width Setting for a Computer in the Armada 7300 Family of Personal Computers*

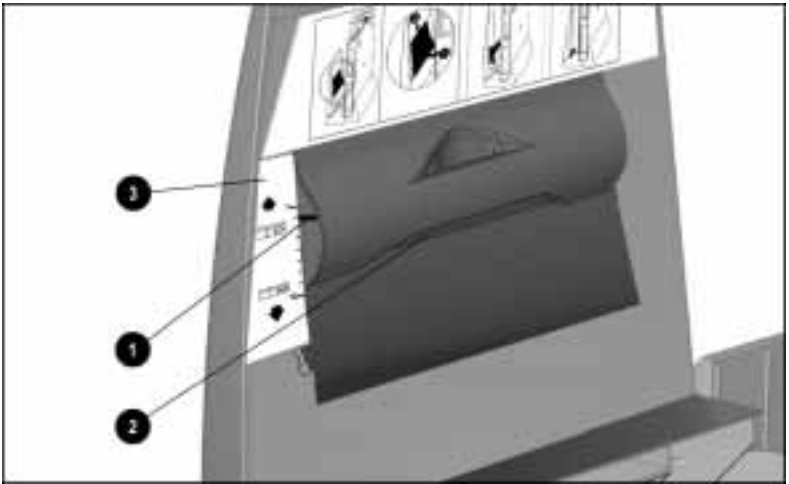


## Adjusting a Tower Stand to a Custom Width




To adjust a tower stand to a computer model not listed on the width table, follow these steps:

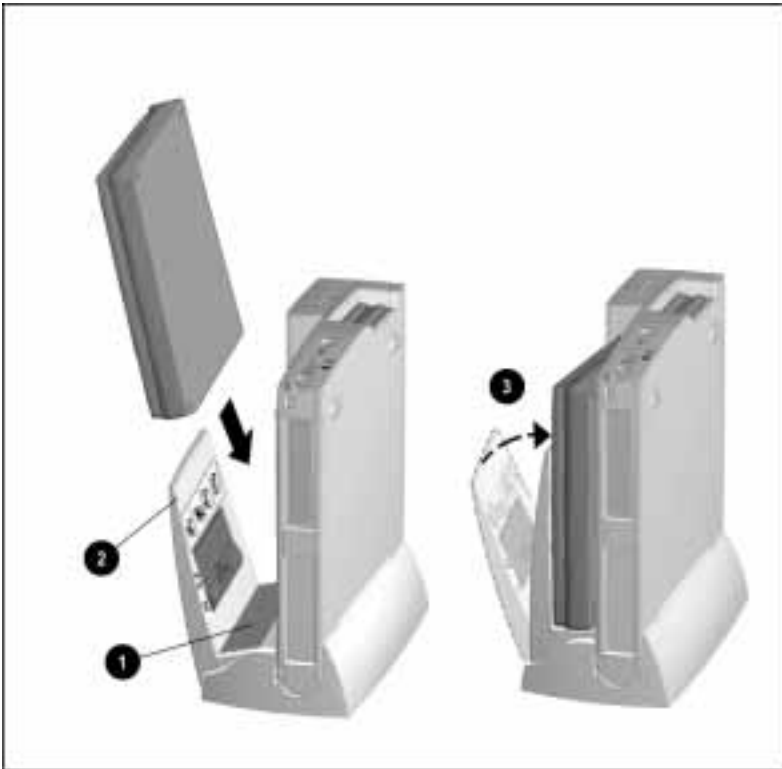
1. Undock the computer.
2. Select a trial width setting by aligning the width selector  on the width adjuster  with any width setting on the width table .

**NOTE:** Width settings near the top of the width table are for thicker computers; settings near the bottom are for thinner computers.



*Identifying the Width Selector, Width Adjuster, and Width Table on the Optional Tower Stand*

3. Place the computer left side down on the docking rail  of the tower stand. The weight of the computer should close the hinged panel  of the tower stand flush against the computer and hold it firmly  against the desktop expansion base.
  - If the hinged panel does not close completely, raise the width selector.
  - If the hinged panel closes but does not hold the computer firmly against the expansion base, lower the width selector.



*Hinged Panel Closing Flush Against the Computer*

4. To confirm that the width of the tower stand is set correctly, slide the computer toward the rear of the expansion base. The width setting is correct if
  - The docking connector on the computer aligns with the docking connector on the expansion base.
  - The motorized docking mechanism activates when the docking connectors come into contact.

# Completing the Setup

If you are setting up the system for the first time, complete the setup by following these steps:

1. Turn on the system by following the instructions under “Turning On the System” in Chapter 1.
2. Turn on the power switch on the external monitor.

To undock the computer, follow the instructions under “Undocking the Computer” in Chapter 4. The undocking process is the same for desktop and tower systems.

# chapter 12

## TROUBLESHOOTING

Problems that appear while using the desktop expansion base may originate in the computer, in software, or in an external device.

- Refer in this chapter to the Quick Solutions Checklist and to the troubleshooting tables on the following topics for help with problems specific to the desktop expansion base.
  - ❑ Audio
  - ❑ Battery charging
  - ❑ Docking and undocking
  - ❑ External device installation
  - ❑ External keyboard
  - ❑ External monitor
  - ❑ External Pointing Device
  - ❑ Infrared
  - ❑ Modem
  - ❑ PC Card
  - ❑ Printer
  - ❑ Removable Drive
  - ❑ USB
- Refer to the documentation that came with your computer for
  - ❑ Help with computer-specific problems, such as infrared, PC Card, and modem software problems.
  - ❑ Additional help with problems common to the computer and the expansion base, such as drive problems, Intelligent Manageability problems, and power condition (on, off, Suspend, and Hibernation) problems.
- Refer also to your external device and software application documentation.

A “Troubleshooting” section is included in your computer’s printed *Reference Guide* and in the online *Reference Guide* preinstalled on your computer.

To access the troubleshooting section of your computer's online *Reference Guide*, click Start→Help→Contents→double-click Troubleshooting.

If a problem persists, refer to Appendix A for information about contacting Compaq customer support.

## Quick Solutions Checklist

- Is the desktop expansion base connected to external power?
- Is the system turned on?
- Is the computer properly docked?
- If the problem is with an external device that has a power switch, is the power switch turned on?
- Are all cables connected properly and securely?
- Have you installed all needed device drivers?
- Should you unlock the expansion base keylock?

# Solving Audio Problems

Solving Audio Problems		
Problem	Possible Cause	Solution
External audio device does not work.	External audio device may not be securely connected.	Make sure the external audio device is securely connected.
	External audio device was connected after the system was turned on.	Turn system off, then on.
	Power to external audio device is turned off.	1. Turn on external device power switch. 2. Turn the system off, then on.
	External audio device is not receiving electrical power.	Make sure power cord is securely connected to electrical outlet. Verify electrical power supply to outlet.
System beeps are not audible.	System beep volume may need adjusting, especially when computer is docked in a tower system.	To increase system beep volume, press <b>Fn+F5</b> on the computer keyboard, then press the right arrow (cursor) key.
System sound is not audible.	System sound has been muted.	To restore or mute sound, toggle the mute button.
Expansion base volume controls are set high, but volume from a connected external audio device is low.	Volume on external audio device is set low.	Increase volume setting on external audio device.
Volume controls on a connected external audio device are set high, but volume from device or expansion base speakers is low.	Expansion base volume settings are set low.	To increase volume of system sound, press the top of the expansion base volume control.

*Continued*

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
System volume settings are lost when a different computer is docked.	Volume settings are stored in the computer.	Reset the expansion base volume control while the new computer is docked.
Computer speakers are mute when computer is docked.	When computer is docked, computer speakers are disabled and expansion base speakers are enabled.	No action is necessary.

## **Solving Battery Pack Charging Problems**

For information about battery pack charging sequence, battery pack status displays, storing battery packs, and running the computer from a battery pack, refer to your computer documentation.

### **Solving Battery Pack Charging Problems**

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
Battery pack is warm to the touch after charging.	Warming occurs during charging.	No action is necessary.
MultiBay light does not turn on to indicate battery pack is charging.	Battery pack is already fully charged.	No action is necessary.
	Battery pack was exposed to temperature extremes.	Allow time for battery pack to return to room temperature.
	Battery pack is at the end of its life.	Replace the battery pack.
	Expansion base is not receiving electrical power.	Make sure power cord is securely connected to electrical outlet. Verify electrical power supply to outlet.
MultiBay release latch does not release battery pack from MultiBay.	The keylock is locked.	Unlock the keylock.

# Solving Docking and Undocking Problems

Solving Docking and Undocking Problems		
Problem	Possible Cause	Solution(s)
Computer unexpectedly initiates Suspend or turns off when it is docked.	The maximum operating temperature was exceeded.	Computer is in an exceedingly hot environment. Let the computer cool down, then turn it on again.
Motorized docking mechanism does not activate.	Expansion base is not receiving electrical power.	Make sure power cord is securely connected to electrical outlet. Verify electrical power supply to outlet.
	The keylock is locked.	Unlock the keylock.
	The computer is not properly seated in the expansion base.	Reinsert the computer into the expansion base. If the expansion base is in an optional tower stand, readjust the width of the tower stand. Refer to Chapter 11.
Motorized undocking mechanism does not activate.	Expansion base is not receiving electrical power.	1. Make sure power cord is securely connected to electrical outlet. 2. Verify electrical power supply to outlet. 3. Release the computer with the manual release latch. Refer to Chapter 3.
	The keylock is locked.	Unlock the keylock.
	Operating system does not support undocking while computer is on or in Suspend.	Turn off the computer before undocking.
Cannot access manual release latch, because rear panel release latch does not work.	The keylock is locked.	Unlock the keylock.



# Solving Expansion Board Problems

Solving Expansion Board Problems		
Problem	Possible Cause	Solution(s)
Expansion board does not work.	Expansion board is not properly seated.	Review the installation steps in Chapter 9 to make sure the expansion board is properly installed.
Expansion board is not recognized by the system.	Drivers for the expansion board are not installed.	Install the expansion board drivers.
	Computer was docked while on or in Suspend.	Restart the computer.
Cannot access expansion board or expansion board slot because rear panel release latch does not work.	The keylock is locked.	Unlock the keylock.

# Solving External Device Installation Problems

Refer also in this chapter to the section(s) specific to the device, such as the “Solving Audio Problems” or “Solving External Monitor Problems” sections. If the device is connected to a USB connector, refer also to the “Solving USB Problems” section.

Solving External Device Installation Problems		
Problem	Possible Cause	Solution
External device is not recognized as part of the system or does not work.	Appropriate software is not installed; settings are incorrect.	For installation and configuration information, refer to the documentation that came with your computer, your operating system, and the external device.
	Power switch of external device is turned off.	1. Turn on external device power switch. 2. Turn the system off, then on.
	External device may not be securely connected.	Make sure external device is securely connected.
	External device and expansion base are not receiving electrical power.	Make sure both power cords are securely connected to electrical outlets.
		Verify electrical power supply to both outlets.

# Solving External Keyboard Problems

If the external keyboard is connected to a USB connector, refer also the “Solving USB Problems” table in this chapter.

Solving External Keyboard Problems		
Problem	Possible Cause	Solution(s)
External keyboard does not work.	External keyboard is not securely connected.	Make sure the external keyboard is securely connected.
External keyboard connected to USB connector does not work.	Computer is not USB-equipped.	Connect the keyboard to one of the two keyboard/mouse connectors.
	Computer is USB-equipped, but the operating system limits external devices connected by USB to two tiers. These tiers can include no more than two hubs on the first tier and no more than one keyboard and one pointing device on the first or second tier.	Reduce the number of connected external USB devices to no more than two hubs on the first tier, and no more than one keyboard and one pointing device on the first or second tier.  Connect the keyboard to one of the two keyboard/mouse connectors.
External keyboard connected to USB connector does not work during startup (before Windows 95 loads).	During startup, only two tiers are supported by the USB connectors. These tiers can include no more than two hubs on the first tier and no more than one keyboard and one pointing device on the first or second tier.	Use the keyboard only after Windows 95 has loaded.
		Reduce the number of connected external USB devices to no more than two hubs on the first tier, and no more than one keyboard and one pointing device on the first or second tier.

*Continued*

## Solving External Keyboard Problems *Continued*

Problem	Possible Cause	Solution(s)
Hotkeys do not work on external keyboard; QuickLock/QuickBlank cannot be initiated with <b>Ctrl+Alt+L</b> or exited with power-on password.	Computer is an Armada 7700 or lower model.	Hotkeys work on an external keyboard only with an Armada 7800 or higher computer model.
	Computer is an Armada 7800 and a USB driver has been loaded.	Unload the USB driver.
Hotkey command did not work on an external keyboard used with an Armada 7800 computer model.	More than five seconds elapsed after you pressed the <b>Scroll Lock</b> key twice.	Press the hotkey command within five seconds after pressing the <b>Scroll Lock</b> key twice within a second. Connect the keyboard to a different keyboard/mouse connector.
External keyboard is locked.	QuickLock is initiated.	Enter your power-on password.

## Solving External Monitor Problems

The following information may help solve overhead projector problems as well as external monitor problems. If the external monitor or overhead projector is connected to a USB connector, refer also to “Solving USB Problems” in this chapter.

### Solving External Monitor Problems

Problem	Possible Cause	Solution
Screen is blank.	External monitor power switch is turned off.	Turn on external monitor power switch.
	External monitor is not securely connected.	Make sure the external monitor is securely connected.

*Continued*

## Solving External Monitor Problems *Continued*

Problem	Possible Cause	Solution
Screen is blank (continued).	External monitor is not receiving electrical power.	Make sure power cord is securely connected to electrical outlet. Verify electrical power supply to outlet.
	Screen save is initiated.	Press any key or click the external pointing device.
	QuickLock/ QuickBlank is initiated.	Enter your power-on password.
	System is in Suspend.	To exit Suspend, press the suspend button.
	Display is switched to the computer.	Press the <b>Fn+F4</b> hotkey on the computer keyboard to toggle among computer display, external monitor display, and simultaneous display.
Display is distorted.	Drivers for the external monitor are not installed.	Install the external monitor drivers.
	External monitor needs adjusting.	For instructions, refer to your external monitor documentation.
	Software settings need adjusting.	For instructions, refer to your computer and external monitor documentation.
	Energy-saving features are enabled and the external monitor is not Energy Star-compliant.	<ol style="list-style-type: none"><li>1. Press any key or move the pointing device.</li><li>2. If display remains distorted, turn the monitor off, then on.</li><li>3. Disable the monitor energy-saving feature. For information, refer to your computer documentation.</li></ol>

# Solving External Pointing Device Problems

If the external pointing device is connected to a USB connector, refer also to “Solving USB Problems” in this chapter.

Solving External Pointing Device Problems		
Problem	Possible Cause	Solution(s)
External pointing device does not work.	External pointing device is not securely connected.	Make sure the external pointing device is securely connected.
	External pointing device driver is not loaded.	Load external pointing device driver.
	External pointing device was connected after the system was turned on.	Turn system off, then on.
Cursor skips or behaves abnormally when using an external pointing device.	External pointing device is not securely connected.	Make sure the external pointing device is securely connected.
	Device is dirty.	Refer to the pointing device documentation for cleaning instructions.
External pointing device connected to USB connector does not work.	Computer is not USB-equipped.	Connect a PS/2-compatible pointing device to one of the two keyboard/mouse connectors; connect a serial pointing device to the serial connector.

*Continued*

## Solving External Pointing Device Problems *Continued*

Problem	Possible Cause	Solution(s)
External pointing device connected to USB connector does not work ( <i>continued</i> ).	Computer is USB-equipped, but the operating system limits external devices connected by USB to two tiers. These tiers can include no more than two hubs on the first tier and no more than one keyboard and one pointing device on the first or second tier.	Reduce the number of connected external USB devices to no more than two hubs on the first tier, and no more than one keyboard and one pointing device on the first or second tier.
		Connect a PS/2-compatible pointing device to one of the two keyboard/mouse connectors; connect a serial pointing device to the serial connector.
External pointing device connected to USB connector does not work during startup (before Windows 95 loads).	During startup, only two tiers are supported by the USB connectors. These tiers can include no more than two hubs on the first tier and no more than one keyboard and one pointing device on the first or second tier.	Use the pointing device only after Windows 95 has loaded.
		Reduce the number of connected external USB devices to no more than two hubs on the first tier, and no more than one keyboard and one pointing device on the first or second tier.

# Solving Infrared Problems

Solving Infrared Problems		
Problem	Possible Cause	Solution
Cannot link with another infrared-equipped device.	Appropriate software is not running on both devices; settings are incorrect.	Refer to your computer documentation for information about preinstalled infrared software; refer also to documentation about the infrared software installed on the target device.
	Target device is not IrDA-compliant.	Refer to the target device documentation.
	A physical condition exists that affects the connection.	Refer to the solutions below for data transmission problems.
	Devices are too far apart.	Move devices closer together. (The maximum distance for IrDA interface is 1.5 feet [.5 meter]; some target devices may require a shorter distance.)
	Devices are placed at too wide an angle.	Lessen the angle between the devices. (The maximum capture angle for IrDA interface is 30 degrees; some target devices may require more direct alignment. Do not point one port more than 15 degrees off the center line away from the other port.)

*Continued*



## Solving Infrared Problems *Continued*

Problem	Possible Cause	Solution
Data transmission problem.	Interference from direct sunlight, energy-saving fluorescent light, or flashing incandescent light.	Remove the interfering light source(s). Move the infrared ports closer together.
	Interference from other infrared-equipped devices.	Keep infrared-equipped remote control units, such as wireless headphones, pointed away from the ports.
	Dirty infrared lens.	Clean the lens with a lint-free cloth.
	Movement.	Do not move either unit during data transmission.
	Physical obstruction.	Remove any objects between the two devices that could be interfering with the line-of-sight data transmission.
Infrared port on computer does not work when computer is docked.	When computer is docked, the infrared port on the computer is disabled and the infrared port on the expansion base is enabled.	Use the infrared port on the expansion base.
		To use the infrared port on the computer, undock the computer.
Infrared ports on the docked computer and the expansion base do not work when optional external infrared transceiver is connected.	When an optional external infrared transceiver is connected to the expansion base, all infrared ports in the system are disabled.	To use the infrared port on the expansion base, disconnect the optional external infrared transceiver.
		To use the infrared port on the computer, undock the computer.

# Solving Modem Problems

Solving Modem Problems		
Problem	Possible Cause	Solution
No dial tone.	Modem software is not correctly configured.	Refer to your computer documentation for information about configuring and troubleshooting preinstalled software. If you are using optional modem software, refer to the application documentation.
	Telephone service is not connected to the telephone wall jack.	Verify service from the local telephone company.
	Modem-equipped computer is not docked.	Dock a modem-equipped computer.
	Modem PC Card is not properly installed or configured.	Review the PC Card installation procedures in Chapter 8 and in your computer and modem PC Card documentation to make sure the modem PC Card is properly installed.  To troubleshoot modem PC Card problems, refer to "Solving PC Card Problems" in this chapter and to the PC Card and modem sections of your computer documentation.
Characters are garbled/transfer rates are slow.	There is noise in the telephone line.	Make sure that your telephone or modem cable is securely connected.
		Request a telephone line filter from your local telephone company.

*Continued*

## Solving Modem Problems *Continued*

Problem	Possible Cause	Solution
Modem does not connect at highest speed.	Line conditions in your area or in the area you are calling may not support the highest connect speeds.	Have your telephone line checked by your local telephone company. <hr/> Try dialing an alternate telephone number for the service you are using.
	The service you are dialing might not support higher connect rates.	Call your service provider and ask whether their modems support K56Flex (for 56 K modems).
	Another device on your telephone line may be causing interference.	Hang up an extension telephone and disconnect any other devices that may be using the same telephone line, then redial.
Modem loses connection.	A connection is loose.	Make sure that your telephone or modem cable is securely connected.
	Call Waiting may be interfering with the connection.	Disable Call Waiting before dialing. For information about disabling Call Waiting, consult your local telephone service provider.  <b>NOTE:</b> In most areas in North America, dialing *70, then the telephone number, disables Call Waiting for the duration of the call.
	Another device on your telephone line may be causing interference.	Hang up an extension telephone and disconnect any other devices that may be using the same telephone line, then redial.
	Your service provider may have an inactivity timeout.	Ask your service provider if idle time on the line terminates the connection.

*Continued*

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
Cannot enable Call Progress when computer is docked. <hr/> Call Progress volume is too loud.	Hotkey commands cannot be used.	To enable Call Progress or adjust volume of Call Progress without using hotkeys <ol style="list-style-type: none"> <li>1. Double-click the volume control icon in the system tray.</li> <li>2. Select Options → Properties.</li> <li>3. Under Show the following volume controls, select PC Speaker.</li> <li>4. Slide the control beneath PC Speaker to the second notch above the bottom.</li> </ol> <p><b>NOTE:</b> If the control beneath PC Speaker is set above the second notch from the bottom, volume will be extremely loud.</p>
Cellular telephone connection doesn't work (North America only).	Environmental factors are interfering with the cellular telephone connection.	Refer to the online <i>Reference Guide</i> → Troubleshooting → Solving Modem Problems → Cellular connection doesn't work → How the environment affects cellular performance.

# Solving PC Card Problems

Solving PC Card Problems		
Problem	Possible Cause	Solution(s)
PC Card does not work.	PC Card software is not properly configured.	Refer to your computer and PC Card documentation for information about using and troubleshooting PC Card software.
Computer does not beep when PC Card is inserted or removed.	System beep volume is set low.	Press <b>Fn+F5</b> on the computer keyboard, then press the right cursor (arrow) key.
PC Cards are not secured when expansion base is locked.	The PC Card security post was not in position when the expansion base was locked.	<ol style="list-style-type: none"><li>1. Unlock the keylock.</li><li>2. Move the PC Card security post in front of the PC Card slots.</li><li>3. Relock the keylock.</li></ol>
PC Cards cannot be removed.	The system has been locked with the PC Card security post in a position that blocks the PC Card slots.	Unlock the keylock, then slide the PC Card security post to the right.
PC Card is not recognized by the system.	PC Card cannot be recognized when computer is in Suspend.	Restart the computer.
	PC Card drivers are not installed.	Install the PC Card drivers.

# Solving Printer Problems

If you experience problems printing, run a printer self-test as instructed in your printer documentation. If the self-test is successful, the problem is not printer-specific.

Solving Printer Problems		
Problem	Possible Cause	Solution
Printer will not turn on.	The signal cable may not be securely connected.	Make sure the printer cable is securely connected.
	Printer is not receiving electrical power.	Make sure power cord is securely connected to electrical outlet. Verify electrical power supply to outlet.
Printer will not print.	Printer is not turned on or is offline.	Turn the printer on and set it to online.
	Correct printer is not selected.	To select the correct printer from within your software application, refer to the application documentation.  To set the correct printer as the default printer, click Control Panel→double-click Printers icon→click the correct printer→File→Set as default.
	Printer driver is not installed.	In Control Panel, double-click Printers→Add Printer, then follow the driver installation instructions.
	Printer cable is too long, unshielded, or defective.	Replace the printer cable.
	Paper tray is empty.	Fill the paper tray with paper. Set the printer to online, if necessary.

*Continued*

## Solving Printer Problems *Continued*

Problem	Possible Cause	Solution
Printer prints garbled information.	Correct printer driver is not installed.	In Control Panel, double-click Printers→Add Printer, then follow instructions to install the driver for your printer.
	Cable is not connected properly.	Make sure the printer cable is securely connected.
	Printer cable is too long, unshielded, or defective.	Replace the cable.

## Solving Removable Drive Problems



**CAUTION:** Maintain an up-to-date backup of your hard drive in case of errors or failures.

### Solving Removable Drive Problems

Problem	Possible Cause	Solution
System does not recognize a removable drive.	The removable drive is not seated properly.	Turn off the system, remove and reinsert the drive, then turn on the system.
	The drive may be damaged.	Try inserting another removable drive in the same bay. Contact your Compaq authorized service provider.
	The drive was inserted while the system was on or in Suspend.	Turn the system off, then on.

*Continued*

## Solving Removable Drive Problems *Continued*

Problem	Possible Cause	Solution
Cannot start from a diskette.	Bootable diskette is not in diskette drive.	Insert bootable diskette in diskette drive.
	Diskette is not bootable.	Verify that the diskette has the system files necessary to start the system.
	Bootable diskette is not first in the MultiBoot (startup) sequence.	To change the MultiBoot (startup) sequence, refer to the Boot Management section of your computer documentation.
	Diskette startup ability is disabled.	To enable diskette startup ability, refer to the Boot Management section of your computer documentation.
Hard drive error occurs.	Hard drive has bad sectors or has failed.	In Explorer, click the drive letter→File→Properties→Error Checking→Tools→Check Now button.
		Run Computer Setup to check the drive.
	Hard drive may be damaged.	Try inserting another removable drive in the same bay.
		Contact your Compaq authorized service provider.
Errors occur after starting up from an additional hard drive.	Additional hard drive does not have the software and drivers necessary to start up and operate correctly.	Start up from the hard drive supplied with the computer or from another hard drive that has the necessary software and drivers.
Cannot remove a removable drive or drive assembly, because MultiBay release latch does not work.	The keylock is locked.	Unlock the keylock.



# Solving USB Problems

If the USB (Universal Serial Bus) device you are troubleshooting is an external keyboard or an external pointing device, refer also to “Solving External Keyboard Problems” and “Solving External Pointing Device Problems” in this chapter.

Solving USB Problems		
Problem	Possible Cause	Solution
External device connected to a USB connector does not work.	Computer does not support USB.	USB is not supported by Armada 7700 and lower computers.
	USB-equipped computer is not docked.	Dock the USB-equipped computer.
	Docked computer is USB-equipped, but the operating system limits external devices connected by USB to two tiers. These tiers can include no more than two hubs on the first tier and no more than one keyboard and one pointing device on the first or second tier.	Reduce the number of connected external USB devices to no more than two hubs on the first tier, and no more than one keyboard and one pointing device on the first or second tier.
		Connect the external device to another connector.

*Continued*

## Solving USB Problems *Continued*

Problem	Possible Cause	Solution
External device connected to USB connector does not work during startup (before Windows 95 loads).	During startup, only two tiers are supported by the USB connectors. These tiers can include no more than two hubs on the first tier and no more than one keyboard and one pointing device on the first or second tier.	Use the external device only after Windows 95 has loaded. <hr/> Reduce the number of connected external USB devices to no more than two hubs on the first tier, and no more than one keyboard and one pointing device on the first or second tier.
A New Hardware Found message appears on the display although the external device was previously recognized by the system.	The device was not connected to the same USB port.	No reconfiguration is necessary. Click Cancel or Finish to close the message. <hr/> Connect the external device to the other USB connector.
Five tiers of USB external devices function normally, but external devices in the sixth tier do not work.	The operating system on the computer supports up to five tiers.	Replace some of the hubs in the first five tiers with hubs containing additional sockets. Connect the external devices in the sixth tier to the new hubs in the first five tiers. <hr/> Connect some of the external devices in the first five tiers to other connectors, then replace them in the USB chain with external devices from the sixth tier.
External devices in lower tiers do not work.	An unpowered hub is connected to another unpowered hub.	Use only powered hubs. <hr/> Make sure that all unpowered hubs are preceded by powered hubs in the USB chain.

## COMPAQ CUSTOMER SUPPORT

### Key Replacement

To replace a lost or stolen key, contact the Fort Lock Corporation:

Fort Lock Corporation  
3000 North River Road  
River Grove, IL 60171  
(708) 458-1100

**NOTE:** You must provide the numbers on your keylock.

### Worldwide Telephone Numbers

Locate your geographical area in the following table and use one of the telephone numbers for Compaq assistance.

**General Information Numbers**—Product information, technical assistance, and the location of your nearest Compaq authorized dealer, reseller, or service provider.

**Technical Support Numbers**—Hardware technical support in analyzing system configuration and diagnostic problems or troubleshooting.

**Customer Support Numbers**—Information on service and support programs including warranty, product catalogs, and white papers.

**PaqFax Numbers**—Automatic facsimile response system for technical and product-specific information that is transmitted to any fax machine. PaqFax is available 24 hours a day.

**NOTE:** Telephone numbers are subject to change without notice.

\* Indicates toll-free domestic numbers.

## Worldwide Telephone Numbers

Location	Country Code	Telephone Number
<b>Argentina</b>		
General Information	+54	-1-796-1616
Technical Support	+54	-1-796-1717
<b>Australia</b>		
General Information		61-2-9911-1999
Technical Support		61-2-9911-1955
PaqFax		61-2-9911-1982
<b>Austria</b>		
General Information*		0222/8 78-16-16
Technical Support*		0222/8 78-16-16
Order Software Backup	+31	-55-38-43-39
<b>Belgium / Luxembourg</b>		
Compaq Care Center	Bel Lux	0903-99036 (45 BFr/min.) 089/89.232
General Fax	+32	(0)2/725 22 13
Infoline (resellers, brochures)	+32	(0)2/716 96 96
QuickLine (BBS)	+32	(0)2/716 95 92
Order Software Backup	+32	(0)2/716 96 78
Order Software Backup by Fax	+32	(0)2/716 96 79
<b>Brazil</b>		
General Information	+55	-11-246-7866
<b>Canada</b>		
General Information		1-905-707-1715
Technical Support*		1-800-OKCOMPAQ (1-800-652-6672)
Customer Support*		1-800-263-5868
Order Software Backup*		1-800-952-7689
Battery Pack Recycling*		1-800-263-5868
<b>Caribbean</b>		
General Information		1-281-514-4220
Technical Support		1-281-518-2200

*Continued*

**Worldwide Telephone Numbers** *Continued*

<b>Location</b>	<b>Country Code</b>	<b>Telephone Number</b>
<b>Chile</b>		
General Information	+56	-2-274-1911
Technical Support	+56	-2-274-3007
<b>China</b>		
General Information	+86	-10-6831-3399
Technical Support	+86	-10-6834-6721
<b>Colombia</b>		
General Information	+57	-1-312-0201
Technical Support	+57	-1-345-0266
<b>Czech Republic</b>		
General Information	+420	-2-232-8772
Technical Support	+420	-2-232-8772
<b>Denmark</b>		
General Information	+45	-45-90-45-90
Technical Support	+45	-45-90-45-45
<b>Finland</b>		
General Information	+358	-0-615 599
Technical Support*		0203-206 720
QuickLine (BBS)	+358	-0-6155 9870
<b>France</b>		
General Information	+33	-1-41-33-41-33
Technical Support	+33	-1-41-33-44-55
<b>Germany</b>		
	0,48 DM/min.	
Hotline		0180/5 21 21 11
Hotline Fax		0180/5 21 21 17
Infoline		0180/3 22 12 21
Infoline Fax		0180/3 22 12 20
QuickLine		0180/5 21 21 18
FaxPaq		0180/5 21 21 19
Order Software Backup*		0130/81 10 81

*Continued*

**Worldwide Telephone Numbers** *Continued*

<b>Location</b>	<b>Country Code</b>	<b>Telephone Number</b>
<b>Hong Kong</b>		
General Information		852-28681382
Technical Support		852-90116633
PaqFax		852-28671648
<b>Hungary</b>		
General Information	+36	-1-457-3600
Technical Support	+36	-1-457-3682
<b>India</b>		
General Information		91-80-559-6023
PaqFax		91-80-559-8989
BBS		91-80-559-8900
<b>Israel</b>		
General Information	+972	-3-6363-444
Technical Support	+972	-3-6363-444
PaqFax	+972	-3-6396-601
<b>Italy</b>		
	09:00–18:00 cet	
Information		167-464911
Software Backup		167-859030
Technical Support		02-69633281
	24 Hours	
Fax Support		02-69633282
BBS Service		02-89200222
<b>Japan</b>		
General Information*		0120-101-589
Technical Support*		0120-101-589
Windows 95 Support*		0120-505-589
Order Software Backup *		0120-250-589
FaxStation		81-3-5402-0991

*Continued*

**Worldwide Telephone Numbers** *Continued*

<b>Location</b>	<b>Country Code</b>	<b>Telephone Number</b>
<b>Korea</b>		
Product Information		82-2-523-3575
Customer Support		82-080-902-7777
<b>Malaysia</b>		
General Information		603-717-1188
Technical Support		603-718-1636
<b>Mexico</b>		
General Information	+52	-5-229-7900
Technical Support	+52	-5-229-7910
PaqFax	+52	-5-229-7920
<b>Netherlands</b>		
General Information		0182-565805
Customer Support*		06-91681616 (Dfl. 0.75/min)
Fax*		06-8991116 (Dfl. 0.40/min)
QuickLine Bulletin Board		0182-572366
<b>New Zealand</b>		
General Information		64-9-307-3969
<b>Norway</b>		
General Information	+47	-22-07-20-00
Technical Support	+47	-22-07-20-20
<b>Poland</b>		
General Information	+48	-2-630-3535
Technical Support	+48	-2-630-3535
<b>Portugal</b>		
General Information	+351	-1-4128400
Technical Support	+351	-1-4128460
<b>Russia</b>		
General Information	+7	-095-967-1700
Technical Support	+7	-095-967-1700
PaqFax	+7	-095-967-1701

*Continued*

**Worldwide Telephone Numbers** *Continued*

<b>Location</b>	<b>Country Code</b>	<b>Telephone Number</b>
<b>Singapore</b>		
General Information		65-753-6688
Customer Support Center		65-750-3030
PaqFax		65-750-4514
<b>South Africa</b>		
General Information		27-11-728-6999
Technical Support		27-11-728-6999
<b>Spain</b>		
General Information	+34	-902.10.14.14
Technical Support	+34	-1-640-1302
<b>Sweden</b>		
General Information	+46	-8-703-5240
Technical Support	+46	-8-703-5240
PaqFax (hämtfax)	+46	-8-703-5225
QuickLine (BBS)	+46	-8-703-5220
<b>Switzerland</b>		
General Information		0844 844 111
Technical Support		01/838 22 22 (German) 01/838 22 23 (French)
QuickLine Bulletin Board		01/838-24 21
Order Software Backup		0800 556 206
<b>Taiwan</b>		
General Information		886-2-7351000
Technical Support		886-2-3761170
BBS		886-2-3761175
<b>Thailand</b>		
General Information		62-2-679-6222
<b>United Arab Emirates (Dubai)</b>		
General Information	+97	14 -818100

*Continued*



**Worldwide Telephone Numbers** *Continued*

<b>Location</b>	<b>Country Code</b>	<b>Telephone Number</b>
<b>United Kingdom</b>		
General Information		0990-134456
FaxPaq		0181-332-3550
QuickLine Bulletin Board		0181-332-9499
<b>United States</b>		
Product Information*		1-800-345-1518
Technical Support*		1-800-OKCOMPAQ (1-800-652-6672)
PaqFax*		1-800-345-1518, Option 1
Download Facility (modem access only)		1-281-518-1418
Order Software Backup*		1-800-952-7689
Battery Pack Recycling*		1-800-524-9859
<b>Venezuela</b>		
General Information	+58	-2-953-6944

## REGULATORY NOTICES

### Regulatory Agency Identification Numbers

Regulatory agencies worldwide use agency series numbers for product identification. Each approved product displays the assigned agency series number. To ensure continued safe and reliable operation, the Compaq 2895 agency series docking base is approved for use with the following Compaq products:

<b>Option</b>	<b>Agency Series Number</b>
■ Armada 7700 Battery Pack	2891
■ Armada 7300 Battery Pack	2911
■ Notebook CPU	2890 Family 2910 Family

The expansion base may be used with Compaq products in a later series if the 2895 agency series docking base is listed under “Regulatory Agency Series Numbers” in printed documentation for the later series of products.

# Federal Communications Commission Notice

Part 15 of the Federal Communications Commission (FCC) Rules and Regulations has established Radio Frequency (RF) emission limits to provide an interference-free radio frequency spectrum. Many electronic devices, including computers, generate RF energy incidental to their intended function and are, therefore, covered by these rules. These rules place computers and related peripheral devices into two classes, A and B, depending upon their intended installation. Class A devices are those that may reasonably be expected to be installed in a business or commercial environment. Class B devices are those that may reasonably be expected to be installed in a residential environment (i.e., personal computers). The FCC requires devices in both classes to bear a label indicating the interference potential of the device as well as additional operating instructions for the user.

The rating label on the device shows which class (A or B) the equipment falls into. Class B devices have an FCC logo or FCC ID on the label. Class A devices do not have an FCC ID or logo on the label. Once the class of the device is determined, refer to the following corresponding statement.

## **Class A Equipment**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

## **Class B Equipment**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

## **Declaration of Conformity for Products Marked with the FCC Logo (United States only)**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions regarding this declaration, write

Compaq Computer Corporation  
P. O. Box 692000, Mail Stop 510101  
Houston TX 77269-2000  
or call 281-514-3333

To identify your product, refer to the part, series, or model number found on the product.

If you have questions about your product that are *not* related to this declaration, please write

Compaq Computer Corporation  
P. O. Box 692000, Mail Stop 530113  
Houston TX 77269-2000

or call Compaq

Product Information Center 1-800-345-1518  
Technical Support 1-800-OKCOMPAQ  
(1-800-652-6672).

## **Modifications**

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Compaq Computer Corporation may void the user's authority to operate the equipment.

## **Cables**

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

# Canadian Notice (Avis Canadien)

## Class A Equipment

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

## Class B Equipment

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

## European Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

- EN55022 (CISPR 22)—Electromagnetic Interference
- EN50082-1 (IEC801-2, IEC801-3, IEC801-4)—  
Electromagnetic Immunity
- EN60950 (IEC950)—Product Safety

## Japanese Notice

ご使用になっている装置にVCCIマークが付いていましたら、次の説明文をお読み下さい。

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境でを使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCIマークが付いていない場合には、次の点にご注意下さい。

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

## Taiwanese Notice

**警告使用者：**

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

## German Ergonomics Notice

The Compaq 2895 agency series docking base meets the requirements of ZH 1/618 (German Safety Regulations for Display Work Places in the Office Sector) when used in conjunction with Compaq computers, keyboards, and monitors that bear the “GS” approval mark.

## Power Cords

If you were not provided with a power cord for your computer or for an AC power accessory intended for use with your computer, you should purchase a power cord that is approved for use in your country.

The power cord must be rated for the product and for the voltage and current marked on the product's electrical ratings label. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product. In addition, the diameter of the wire must be a minimum of 0.75 mm<sup>2</sup>/18AWG, and the length of the cord must be between 5 feet (1.5 m) and 6½ feet (2 m). If you have questions about the type of power cord to use, contact your Compaq authorized service provider.

A power cord should be routed so that it is not likely to be walked on or pinched by items placed upon it or against it. Particular attention should be paid to the plug, electrical outlet, and the point where the cord exits from the product.

## Safety Precautions for Modems

Always follow these basic safety precautions when using a modem or telephone that is *not* cordless.



**WARNING:** To reduce the risk of personal injury, electric shock, or fire:

- Never connect or use a modem or telephone during a lightning storm. There may be a remote risk of electric shock from lightning.
  - Never connect or use a modem or telephone in a wet location.
  - Never use a modem or telephone to report a gas leak in the vicinity of the leak.
  - Always disconnect the modem cable before opening the equipment enclosure or touching an uninsulated modem cable, jack, or internal components.
- 

For regulatory notices relevant to the modem and its connection to the Public Switched Telephone Network, refer to Appendix B of the hard copy computer *Reference Guide*.



# Laser Safety

All Compaq systems equipped with laser products comply with appropriate safety standards, including IEC 825. With specific regard to the laser, the equipment complies with laser product performance standards set by government agencies for Class 1 laser products. It does not emit hazardous light; the beam is totally enclosed during all modes of customer operation and maintenance.

## CDRH Regulations

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration implemented regulations for laser products on August 2, 1976. These regulations apply to laser products manufactured from August 1, 1976. Compliance is mandatory for products marketed in the United States.



**WARNING:** Use of controls or adjustments or performance of procedures other than those specified herein or in the laser product installation guide may result in hazardous radiation exposure.



This system is classified as a Class 1 laser product.  
This label appears on the laser product.

## Laser Information

Laser Type:	Semiconductor GaAlAs
Wave Length:	780 ± 35 nm
Divergence Angle:	53.5° ± 1.5°
Output Power:	Less than 0.2mW or 10,869 W·m <sup>-2</sup> ·sr <sup>-1</sup>
Polarization:	Circular
Numerical Aperture:	0.45 ± 0.04

Only authorized technicians trained by Compaq should attempt to repair this equipment. All troubleshooting and repair procedures are detailed to allow only subassembly/module level repair. Because of the complexity of the individual boards and sub-assemblies, no one should attempt to make repairs at the component level or to make modifications to any printed wiring board. Improper repairs can create a safety hazard.

## ELECTROSTATIC DISCHARGE

A discharge of static electricity from fingers or other electrostatic conductors may damage electronic components. Before handling electrostatic-sensitive components, discharge static electricity by one of the methods described in this appendix.

### Preventing Electrostatic Discharge

#### When Handling Removable Drives

To prevent electrostatic damage to removable drives, observe these precautions:

- Before handling a removable drive, discharge static electricity by touching the unpainted metal surface or lug nuts on the connectors on the back of the computer.
- Avoid touching connector pins on the computer and on the removable drive.
- Keep a removable drive in its carrying case until you are ready to insert it into a drive bay.

#### When Installing Internal Components

To prevent electrostatic damage when installing internal components, observe these precautions:

- Keep components in their electrostatic-safe containers until you are ready to install them.
- Have everything needed for the installation within reach so that you do not have to leave the area after beginning installation.
- Use nonmagnetic tools.

- Before touching an electronic component, discharge static electricity by one of the grounding methods described later in this appendix. If you must leave the area during installation, remember to reground yourself before resuming installation.
- Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.
- If you remove a component, place it in an electrostatic-safe container.

## Grounding Methods

There are several methods for grounding. Use one or more of the following grounding methods when installing components in the computer or expansion base.

- Touch the unpainted metal surface or lug nuts on the connectors on the back of the computer or expansion base. Avoid touching connector pins. If installation instructions direct you to unplug the computer or expansion base, unplug it after being properly grounded and before removing the cover.
- Touch an exterior unpainted metal surface of equipment that is connected to an electrical outlet by a grounding plug.
- Use a wrist strap connected by a ground cord to the computer chassis. Wrist straps are flexible grounding straps with a minimum of 1 megohm  $\pm$  10 percent resistance in the ground cords. To provide proper ground, wear the strap snug against the skin.

**NOTE:** If you need more information about static electricity or assistance with product installation, contact your Compaq authorized dealer, reseller, or service provider.

# SPECIFICATIONS

This appendix provides electrical and physical specifications for the desktop expansion base.

Desktop Expansion Base Power Supply (Input)	
Electrical Ratings	
100 to 120 VAC input	5.0 Amp
200 to 240 VAC input	2.5 Amp
Frequency	50-60 Hz

The expansion base is designed in accordance with ANSI specifications (no.X3.131-1993, Rev 10h) and IEEE 802.3 specifications.

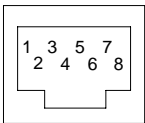
**NOTE:** This product is designed for IT power systems in Norway with phase-to-phase voltage not exceeding 240Vrms.

Desktop Expansion Base Dimensions		
Height		
With monitor support cover	5.6 in	(14.2 cm)
Without monitor support cover	5.0 in	(12.7 cm)
Depth	16.0 in	(40.6 cm)
Width	18.3 in	(46.5 cm)
Weight		
With monitor support cover	22.7 lb	(10.2 kg)
Without monitor support cover	19.4 lb	(8.7 kg)

# CONNECTOR PIN ASSIGNMENTS

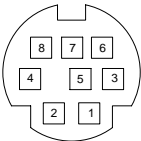
This appendix illustrates the desktop expansion base external device connectors and identifies the signal specific to each connector pin.

## Ethernet RJ-45 Jack



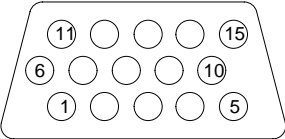
Pin	Signal	Pin	Signal
1	(+) Transmit Data	5	Unused
2	(-) Transmit Data	6	(-) Receive Data
3	(+) Receive Data	7	Unused
4	Unused	8	Unused

## External Infrared Transceiver Connector



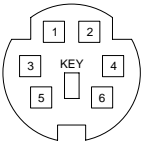
Pin	Signal	Pin	Signal
1	Infrared Transmit	5	ID 0
2	Infrared Receive	6	ID 1
3	Ground	7	ID 2
4	Vcc	8	ID 3

# External Monitor Connector



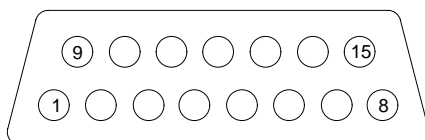
Pin	Signal	Pin	Signal
1	Red Analog	9	+5 Volt Supply
2	Green Analog	10	Ground
3	Blue Analog	11	Monitor ID Bit 0
4	Monitor ID Bit 2	12	Monitor ID Bit 1 (SDA)
5	Ground	13	Horizontal Sync
6	Ground	14	Vertical Sync
7	Ground	15	Monitor ID Bit 3 (SCL)
8	Ground		

# Keyboard/Mouse Connectors (2)



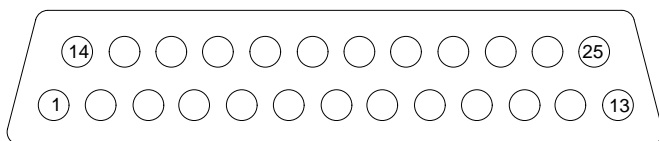
Pin	Signal	Pin	Signal
1	Data	4	+5 VDC
2	Unused	5	Clock
3	Ground	6	Unused

## MIDI/Game Connector



Pin	Signal	Pin	Signal
1	Vcc	9	Vcc
2	Joystick A - X Button	10	Joystick B - X Button
3	Joystick A - X Direction	11	Joystick B - X Direction
4	Ground	12	MIDI Out
5	Ground	13	Joystick B - Y Direction
6	Joystick A - Y Direction	14	Joystick B - Y Button
7	Joystick A - Y Button	15	MIDI In
8	Vcc		

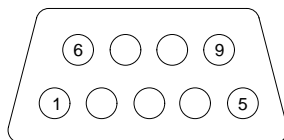
## Parallel Connector



Pin	Signal	Pin	Signal
1	Strobe	14	Auto Linefeed
2	Data Bit 0	15	Error
3	Data Bit 1	16	Initialize Printer
4	Data Bit 2	17	Select In
5	Data Bit 3	18	Ground
6	Data Bit 4	19	Ground
7	Data Bit 5	20	Ground
8	Data Bit 6	21	Ground
9	Data Bit 7	22	Ground
10	Acknowledge	23	Ground
11	Busy	24	Ground
12	Paper Out	25	Ground
13	Select		



## Serial Connector



Pin	Signal	Pin	Signal
1	Carrier Detect	6	Data Set Ready
2	Receive Data	7	Ready to Send
3	Transmit Data	8	Clear to Send
4	Data Terminal Ready	9	Ring Indicator
5	Ground		

## USB Connectors (2)



Pin	Signal	Pin	Signal
1	VCC	3	(+) Data
2	(-) Data	4	Ground

# INDEX

## A

### adapter

- 3-to-2-prong plug, 1-1, 1-7
- Armada 7000 Half-Height MultiBay,
  - 7-1, 10-1, 10-15
- Armada 7000 Hard Drive MultiBay,
  - 7-4–7-6, 7-13, 7-14
- Armada 7000 Removable Drive MultiBay, 7-4, 7-5, 7-7, 7-13, 7-14
- Armada 7300 Hard Drive MultiBay, 7-5
- LTE 5000 Half-Height MultiBay,
  - 7-1, 10-1, 10-15

- selecting, for half-height bay, 7-1
- selecting, for removable drive, 7-4

### alignment guides, 2-2, 4-10

### alignment tray, 2-2, 10-5, 10-14

### Armada 7000 Half-Height MultiBay

#### Adapter

- drive adapters required, 7-4
- installing, 10-1
- obtaining, 7-5
- preinstalled, 7-1
- removing, 10-15
- replacing, 7-1

### Armada 7000 Hard Drive MultiBay

#### Adapter

- inserting hard drive into, 7-6
- inserting into MultiBay, 7-13
- obtaining, 7-5
- removing from MultiBay, 7-14
- removing hard drive from, 7-6

### Armada 7000 Removable Drive

#### MultiBay Adapter

- drives requiring, 7-4
- inserting drive into, 7-8, 7-10
- inserting into MultiBay, 7-13
- obtaining, 7-5
- removing drive from, 7-9, 7-11
- removing from MultiBay, 7-14
- two models of, 7-7

### Armada 7300 Hard Drive MultiBay

#### Adapter, 7-4, 7-5

### Armada Integrated Netflex-3 Ethernet

#### Drivers Diskettes 1 and 2, 3-13

- attachment for security cable
  - security cable slot, 2-7, 5-5
  - U-bolt, 2-6, 5-5

### audio bass port, 2-1

### audio equipment

- CD player, 3-2, 3-3
  - connecting, 3-2, 3-3
- external microphone, 3-2, 3-3
- external stereo speakers, 3-2, 3-3
- headphone, headset, 3-2, 3-3, 3-9
- managing volume, 3-4
- tape recorder, 3-2, 3-3
- troubleshooting, 12-3, 12-7
- tuner, 3-2, 3-3
- turning on, 3-2

### audio features

- audio bass port, 2-1
- headphone jack, 2-5, 3-3
- microphone jack, 2-5, 3-3
- mute button, 2-5, 3-4
- stereo line-in jack, 2-7, 3-3
- stereo line-out jack, 2-7, 3-3
- stereo speakers, internal, 2-2
- volume control, 2-4, 3-4

## B

### battery pack

- charging, 6-1
- inserting into MultiBay, 6-2
- removing from MultiBay, 6-2
- securing, 5-2
- troubleshooting, 12-4

### beeps, system, 3-4, 12-3

### bezel, half-height bay blank, 10-8, 10-18

### button

- computer eject, 2-4, 4-6
- mute, 2-5, 3-4
- PC Card eject, 8-4
- power, 1-9, 2-5, 3-2, 4-4, 4-6
- suspend, 2-3, 4-4, 4-5

# C

## cable

- country-specific modem, 3-7
- expansion board, 9-8, 9-9
- external infrared transceiver, 3-10
- half-height drive power, 10-1
- lock, 5-5
- network, 3-12
- PC Card, 1-8, 4-3, 4-6, 8-3
- security, 2-6, 2-7, 5-5
- telephone, 3-7
- twisted pair, 3-12

## cable lock, 5-5

## carrier

- key, 1-2
- LTE 5000 MultiBay Hard Drive, 7-4, 7-12-7-14

## CD player

- connecting, 3-2, 3-3
- managing volume, 3-4
- troubleshooting, 12-3, 12-7

## CD-ROM drive

- adapter required, 7-4
- care and handling, 7-2, 10-2, C-1
- combining with other drives, 7-3
- inserting into Armada 7000
  - Removable Drive MultiBay Adapter with one release latch, 7-8

## inserting into Armada 7000

- Removable Drive MultiBay Adapter with two release latches, 7-10

## inserting into MultiBay, 7-13

## mailing, 7-2, 10-2

## recognition of, by system, 4-1, 4-2

## removing from Armada 7000

- Removable Drive MultiBay Adapter with one release latch, 7-9

## removing from Armada 7000

- Removable Drive MultiBay Adapter with two release latches, 7-11

## removing from MultiBay, 7-14

## securing, 5-2

## supported by expansion base, 7-3

## troubleshooting, 12-20

## cellular telephone, 12-15

## Compaq

## CPQNET, 3-13

## Internet site, 3-13

## Support Software CD, 3-13

## worldwide telephone numbers, A-1

## computer eject button, 2-4, 4-6

## connector

## 25-pin, 2-7, 3-6, 3-7

## docking, on computer, 1-8, 4-3, 4-6, 11-5, 11-8

## docking, on expansion base, 1-8, 2-2, 4-3, 4-6, 11-5, 11-8

## expansion board, external, 9-8

## expansion board, internal, 9-6

## external infrared transceiver, 2-7, 3-8, 3-10, E-1

## external monitor, 1-12, 2-7, 3-1, E-2

## keyboard/mouse, 1-5, 1-12, 2-6, 3-1, E-2

## MIDI/game, 2-7, E-3

## parallel, 2-6, 3-1, E-3

## PC Card, 8-3

## power, 1-7, 2-6

## selecting a, 3-1

## serial, 1-5, 1-12, 2-6, 3-1, E-4

## USB, 2-6, E-4

## cover, for half-height bay. *See* bezel, half-height bay blank

## customer support, A-1

# D

## device driver

## Ethernet network, 3-13

## expansion board, 12-6

## dimensions, D-1

## diskette drive

## adapter required, 7-4

## care and handling, 7-2, 10-2, C-1

## combining with other drives, 7-3

## inserting into Armada 7000

## Removable Drive MultiBay

## Adapter with one release latch, 7-8

## inserting into Armada 7000

## Removable Drive MultiBay

## Adapter with two release latches, 7-10

## inserting into MultiBay, 7-13

## mailing, 7-2, 10-2

## recognition of, by system, 4-1, 4-2

- removing from an Armada 7000
  - Removable Drive MultiBay Adapter with one release latch, 7-9
- removing from Armada 7000
  - Removable Drive MultiBay Adapter with two release latches, 7-11
- removing from MultiBay, 7-14
- securing, 5-2
- supported by expansion base, 7-3
- troubleshooting, 12-20
- docking computer, 4-4
  - alignment guides, 2-2
  - for the first time, 1-8, 4-3
  - in tower system, 11-4
  - motorized docking mechanism, 1-8, 4-3, 11-5, 11-8
  - procedure, 1-8, 4-3, 11-4
  - troubleshooting, 12-5
  - while computer is in Hibernation, 4-1
  - while computer is in Suspend, 4-1, 4-3
  - while computer is on, 4-1, 4-3
- docking connector
  - on computer, 1-8, 4-3, 4-6, 11-5, 11-8
  - on expansion base, 1-8, 2-2, 4-3, 4-6, 11-5, 11-8
- docking latch, 2-2, 5-2, 10-5
- docking rail, 11-8
- drive. *See* removable drive
- drivers. *See* device driver

## E

- eject button. *See* computer eject button
- electrostatic discharge, C-1
- Elite hard drive. *See* LTE Elite hard drive
- ESD, C-1
- Ethernet network, 3-11–3-14
- expansion board
  - alignment rail, 9-7
  - bracket, 9-7
  - cable, 9-8, 9-9
  - connectors, external, 9-8
  - connectors, internal, 9-6
  - handling, C-1
  - installing, 9-1

- ISA, 9-1
- PCI, 9-1
- recognition of, by system, 4-1, 4-2
- removing, 9-9
- securing, 5-2
- slot, 9-1, 9-4, 9-6, 9-7
- slot cover, 2-5, 9-4–9-6, 9-7, 9-10
- slot cover chassis, 9-5, 9-7, 9-9
- slot cover screw, 9-5, 9-7, 9-9, 9-10
- troubleshooting, 12-6
- external device
  - adding to system, 3-2
  - connecting, 3-1, 3-2
  - disconnecting, 1-8, 4-3, 4-6
  - troubleshooting, 12-7
  - turning on, 3-2
- External Infrared Transceiver, 3-10
- external infrared transceiver connector, 2-7, 3-8, 3-10, E-1
- external keyboard
  - connecting, 1-5, 1-12, 3-1
  - troubleshooting, 12-7, 12-8
  - using hotkey, 3-5
- external microphone, 3-2
  - connecting, 3-2, 3-3
  - managing volume, 3-4
  - troubleshooting, 12-3, 12-7
- external monitor
  - connecting, 1-12, 3-1
  - power switch, 1-11, 1-12
  - troubleshooting, 12-7, 12-9
- external monitor connector, 1-12, 2-7, 3-1, E-2
- external numeric keypad, 12-8
  - connecting, 3-2
  - troubleshooting, 12-7, 12-11
- external pointing device
  - connecting, 1-5, 1-12, 3-1
  - troubleshooting, 12-7, 12-11
- external stereo speakers
  - connecting, 3-2, 3-3
  - managing volume, 3-4
  - troubleshooting, 12-3, 12-7

## F

- fan, 2-7
- floppy disk drive. *See* diskette drive

# G

grounding strap, 10-13, 10-19

# H

half-height bay, 2-2

blank bezel, 10-8, 10-18

converting to half-height drive bay,  
7-1, 10-1

converting to LTE 5000 MultiBay,  
7-1, 10-1

converting to MultiBay, 7-1, 10-1

drive cage, 10-7–10-13, 10-7–10-13

drive cage shield, 10-7, 10-12–10-13,  
10-19

drive cage shield slots, 10-12

installing device in, 10-1

removing device from, 10-15

half-height drive, 7-1, 10-1–10-19

half-height drive power cable, 10-1

hard drive

adapter required, 7-4

care and handling, 7-2, 10-2, C-1

combining with other drives, 7-3

inserting into Armada 7000 Hard

Drive MultiBay Adapter, 7-6

inserting into MultiBay, 7-13

LTE secondary-capable, 7-3, 7-4

mailing, 7-2, 10-2

recognition of, by system, 4-1, 4-2

removing from Armada 7000 Hard

Drive MultiBay Adapter, 7-6

removing from MultiBay, 7-14

securing, 5-2

supported by expansion base, 7-3

troubleshooting, 12-20

headphone jack, 2-5, 3-3

headphone, headset

affecting infrared transmission, 3-9

connecting, 3-2, 3-3

managing volume, 3-4

troubleshooting, 12-3, 12-7

Hibernation

docking while computer is in, 4-1

not available when computer is

docked, 4-5

responding to prompt, 4-1

hotkey

troubleshooting, 12-8

using with external keyboard, 3-5,  
3-6

# I

IDE device, 7-1

infrared, 3-8–3-10

establishing link, 3-8

external infrared transceiver

connector, 2-7

IrDA compliance, 3-8, 3-9

port, 2-4, 3-8–3-10

troubleshooting, 12-13

ISA expansion board, 9-1, 9-6. *See also*  
expansion board

# J

jack

analog, 3-7

headphone, 2-5, 3-3

microphone, 2-5, 3-3

network, 3-12

RJ-11, 2-7, 3-6, 3-7

RJ-45, 2-6, 3-12, E-1

stereo line-in, 2-7, 3-3

stereo line-out, 2-7, 3-3

telephone, 3-7

joystick

connecting, 3-2

troubleshooting, 12-7

# K

key. *See also* cable lock; keylock

location when shipped, 1-1

removing from PC Card slot, 1-2

replacing, 5-4, A-1

spare, 5-1

keyboard. *See* external keyboard

keyboard/mouse connector, 2-6, 3-1,  
E-2

keylock, 2-5, 5-1–5-4. *See also* cable  
lock; key

components secured, 5-2

locking and unlocking, 5-3

numbers on, 5-4, A-1

securing the system, 5-1–5-5

keypad, numeric. *See* external numeric  
keypad

## L

### latch

- docking, 2-2, 5-2, 10-5
- MultiBay device release, 5-2, 7-13, 7-14
- MultiBay release, 6-2
- one-latch model of Armada 7000
  - Removable Drive MultiBay Adapter, 7-7
- rear panel release, 2-7, 4-9, 5-2, 9-3, 9-8, 10-4
- two-latch model of Armada 7000
  - Removable Drive MultiBay Adapter, 7-7

### light

- affecting infrared transmission, 3-9
- MultiBay, 2-3, 6-1, 7-13
- power/suspend, 1-9, 2-3, 2-4, 4-4

### lock. *See* cable lock; key; keylock; security

### LTE 5000 equipment

- CD-ROM drive, 7-2, 7-3, 7-13, 10-2, C-1
- converting half-height bay for use with, 7-1
- diskette drive, 7-2, 7-3, 7-13, 10-2, C-1
- Half-Height MultiBay Adapter, 7-1, 10-1
- hard drive, 7-3–7-5, 7-6, 7-12, 7-13, C-1
- MultiBay Hard Drive Carrier, 7-4, 7-5, 7-12

### LTE Elite hard drive, 7-3, 7-4, C-1

## M

- manual release button, 4-8, 4-10, 5-2
- microphone jack, 2-5, 3-3
- Microsoft Windows 95. *See* Windows 95

### Microsoft Windows NT Workstation. *See* Windows NT

### MIDI device

- connecting, 3-2
- troubleshooting, 12-7

### MIDI/game connector, 2-7, E-3

### modem

- connecting, 3-6, 3-7
- PC Card, 8-2

### troubleshooting, 12-15

### modem connector

- 25-pin connector, 2-7, 3-6
- regional differences, 2-7
- RJ-11 jack, 2-7, 3-6

### monitor connector. *See* external monitor connector

### monitor support cover

- avoiding excess weight on, 1-11
- included with expansion base, 1-1
- installing, 1-11

### monitor support cover slots, 1-11, 2-2

### mouse. *See* external pointing device

### mouse connector. *See* keyboard/mouse connector

### MultiBay

- charging battery pack in, 6-1
- customizing, 7-1
- identified, 2-3
- inserting battery pack into, 6-2
- inserting drive or drive assembly into, 7-13

### LTE 5000. *See* LTE 5000 equipment

- removing battery pack from, 6-2
- removing drive or drive assembly from, 7-14

### requiring drive adapter, 7-4

### securing device in, 5-2

### MultiBay device release latch, 2-3, 5-2, 6-2, 7-13, 7-14

### MultiBay light, 2-3, 6-1, 7-13

### mute button, 2-5, 3-4

## N

### Netflex-3 Controller, 3-13

### network. *See* Ethernet network

### NIC (network interface card). *See*

### Ethernet network, Netflex-3 Controller

### numeric keypad. *See* external numeric keypad

## O

### 100BaseTX Ethernet Module, 3-11, 5-2

### overhead projector

- connecting, 3-1
- toggle display, 3-5
- troubleshooting, 12-7, 12-9

# P

- PaqFax, A-1
- parallel connector, 2-6, 3-1, E-3
- parallel device
  - connecting, 3-1, 3-2
  - troubleshooting, 12-7
- PC Card
  - alignment rails, 8-3
  - cables, 1-8, 4-3, 4-6, 8-3
  - compatible with system, 8-1
  - configuring, 8-1
  - door, 1-2, 2-5, 8-2, 8-4
  - eject button, 8-4
  - inserting, 8-2
  - installing, 8-1
  - installing card and socket services,
    - enablers, 8-1
  - recognition of, by system, 4-1, 4-2
  - removing, 8-1, 8-4
  - responding to beeps, prompts, 8-1
  - securing, 5-2, 5-3
  - securing, 5-3
  - security post, 1-2, 5-2, 5-3, 8-3
  - slot, 1-2, 2-5, 8-2–8-4
  - telephony, 8-2
  - troubleshooting, 12-18
  - Types I, II, and III, 8-2
  - Zoomed Video, 8-2
- PCI expansion board, 9-1, 9-6. *See also* expansion board
- phone numbers, worldwide, A-1
- pin assignments, E-1
- pointing device. *See* external pointing device
- port
  - audio bass, 2-1
  - infrared, 2-4, 3-8, 3-10
- power button, 1-9, 2-5, 3-2, 4-4, 4-6
- power connector, 1-7, 2-6
- power cord, 1-1, 1-7
- power/suspend light, 1-9, 2-3, 2-4, 4-4
- printer, 12-7
  - connecting, 3-1, 3-2
  - troubleshooting, 12-7, 12-19
- PS/2 connector. *See* keyboard/mouse connectors

# Q

- Quick Setup poster, 1-1
- quick solutions checklist, 12-2

# R

- rear panel
  - removing, 4-9, 9-3, 10-4
  - replacing, 4-10, 9-8, 10-14
- rear panel release latch, 2-7, 4-9, 5-2, 9-3, 9-8, 10-4
- removable drive
  - adapter required, 7-4
  - care and handling, 7-2, 10-2, C-1
  - combining with other drives, 7-3
  - inserting in MultiBay, 7-13
  - mailing, 7-2, 10-2
  - obtaining adapter, 7-5
  - recognition of, by system, 4-1, 4-2
  - removing from MultiBay, 7-14
  - securing, 5-2
  - supported by expansion base, 7-3
  - troubleshooting, 12-20
- RJ-11 jack, 2-7, 3-6, 3-7
- RJ-45 jack, 2-6, 3-12, E-1

# S

- SCSI
  - device, 7-1, 9-1
  - installing controller, 9-1
- security, 5-1–5-5
  - 100BaseTX Ethernet Module, 5-2
  - battery packs, 5-2
  - CDs, 5-2
  - diskettes, 5-2
  - expansion board, 5-2
  - keylock, 2-5, 5-1–5-4
  - optional cable lock, 5-5
  - PC Card, 5-2
  - removable drives, 5-2
  - security cable slot, 2-7, 5-5
  - U-bolt, 2-6, 5-5
- security cable slot, 2-7, 5-5
- serial connector, 2-6, 3-1, E-4
- serial device
  - connecting, 3-1, 3-2
  - troubleshooting, 12-7
- serial number, 2-5

- setting up
  - configuration options, 1-3
  - converting desktop system to tower system, 11-2
  - desktop system requirements, 1-3
  - tower system requirements, 1-3
- Small Computer System Interface. *See* SCSI
- speakers. *See* stereo speakers, external stereo speakers
- static electricity, C-1
- stereo line-in jack, 2-7, 3-3
- stereo line-out jack, 2-7, 3-3
- stereo speakers, internal, 2-2, 3-3, 3-4
- Suspend
  - docking while in, 4-1, 4-3
  - indicated by power/suspend light, 4-4
  - suspend button, 4-5
  - troubleshooting, 12-5
  - undocking while in, 4-6
- suspend button, 2-3, 4-4, 4-5
- switch
  - power, on computer, 1-9, 3-2, 4-2, 4-6
  - power, on external device, 3-2
  - power, on external monitor, 1-11, 1-12
  - voltage select, 1-6, 2-7
- system
  - defined, 1-9
  - turning off, 4-4
  - turning on, 1-9, 3-2, 4-4-4-5

## T

- tape recorder
  - connecting, 3-2, 3-3
  - managing volume, 3-4
  - troubleshooting, 12-3, 12-7
- telephone numbers, worldwide, A-1
- telephony PC Card, 8-2
- 3-to-2-prong plug adapter, 1-1, 1-7
- top cover
  - removing, 10-5-10-6
  - replacing, 10-14
- tower stand
  - adjusting width, 11-6-11-8
  - docking computer, 11-4
  - docking rail, 11-8
  - inserting expansion base, 11-3
  - undocking computer, 11-10
  - width adjuster, 11-6, 11-7

- width selector, 11-6-11-8
- width table, 11-6, 11-7
- troubleshooting
  - audio, 12-3
  - battery pack charging, 12-4
  - docking and undocking, 12-5
  - expansion board, 12-6
  - external device installation, 12-7
  - external keyboard, 12-8
  - external monitor, 12-9
  - external pointing device, 12-11
  - infrared, 12-13
  - modem, 12-15
  - PC Card, 12-18
  - printer, 12-19
  - quick solutions checklist, 12-2
  - removable drive, 12-20
  - USB, 12-22
- tuner
  - connecting, 3-2, 3-3
  - managing volume, 3-4
  - troubleshooting, 12-3, 12-7
- turning system off, 4-4
- turning system on, 1-9, 3-2, 4-4-4-5
- 25-pin connector, 2-7, 3-6, 3-7

## U

- U-bolt, 2-6, 5-5
- undocking computer
  - computer eject button, 2-4, 4-6
  - delay, if running Windows 95, 4-7
  - during desktop system setup, 4-6
  - for the first time, 4-6
  - motorized undocking mechanism, 4-6, 5-2
  - procedure, 4-6
  - troubleshooting, 12-5
  - using manual release button, 4-8, 5-2
  - while computer is in Suspend, 4-6
  - while computer is on, 4-6
- USB connector, 2-6, 3-6, 12-8, 12-22, E-4

## V

- voltage select switch, 1-6, 2-7
- volume control, 2-4, 2-5, 3-4



# W

Windows 95

- docking, 4-1, 4-3

- undocking, 4-6, 4-8

Windows NT

- docking, 4-2

- undocking, 4-6, 4-8

worldwide phone numbers, A-1

# Z

Zoomed Video PC Card, 8-2